



## Answer Key

# GRADE 1 • MODULE 4

Place Value, Comparison, Addition and Subtraction to 40

## Lesson 1

### Fluency Practice

Answers will vary.

### Problem Set

1. Groups of 10 circled; 30
2. Groups of 10 circled; 24
3. Groups of 10 circled; 29
4. Groups of 10 circled; 34
5. Groups of 10 circled; 31
6. Groups of 10 circled; 26
7. Groups of 10 circled; 38
8. Groups of 10 circled; 33
9. Number bond shows that 20 and 7 is 27.
10. Number bond shows that 30 and 3 is 33.
11. Number bond shows that 20 and 9 is 29.
12. Number bond shows that 40 and 0 is 40.
13. Groups of 10 circled; 20 and 2 is 22
14. Groups of 10 circled; 30 and 7 is 37
15. Groups of 10 circled; 20 and 10 is 30
16. Groups of 10 circled; 30 and 9 is 39

### Exit Ticket

1. Number bond shows that 20 and 8 is 28.
2. Number bond shows that 30 and 2 is 32.
3. Number bond shows that 40 and 0 is 40.
4. Number bond shows that 30 and 6 is 36.

### Homework

1. Groups of 10 circled; 26
2. Groups of 10 circled; 38
3. Groups of 10 circled; 25
4. Groups of 10 circled; 39
5. Groups of 10 circled; 20 and 7 is 27; 27
6. Groups of 10 circled; 10 and 10 is 20; 20
7. Groups of 10 circled; 20 and 4 is 24; 24
8. Groups of 10 circled; 30 and 6 is 36; 36
9. Groups of 10 circled; 10 and 7 is 17; 17
10. Groups of 10 circled; 20 and 3 is 23; 23
11. Picture of 10 and 8 drawn; 8
12. Picture of 10 more and 3 more drawn; 33

## Lesson 2

### Practice Sheet

- |       |        |        |
|-------|--------|--------|
| 1. 2  | 16. 7  | 31. 8  |
| 2. 3  | 17. 7  | 32. 8  |
| 3. 4  | 18. 8  | 33. 7  |
| 4. 4  | 19. 7  | 34. 6  |
| 5. 4  | 20. 7  | 35. 8  |
| 6. 3  | 21. 5  | 36. 9  |
| 7. 0  | 22. 6  | 37. 10 |
| 8. 4  | 23. 6  | 38. 9  |
| 9. 4  | 24. 5  | 39. 10 |
| 10. 5 | 25. 10 | 40. 7  |
| 11. 6 | 26. 10 | 41. 10 |
| 12. 6 | 27. 9  | 42. 9  |
| 13. 8 | 28. 10 | 43. 8  |
| 14. 8 | 29. 9  | 44. 9  |
| 15. 9 | 30. 10 | 45. 10 |

### Problem Set

- |              |              |
|--------------|--------------|
| 1. 1, 7      | 10. 2, 7; 27 |
| 2. 2, 6      | 11. 3, 9; 39 |
| 3. 2, 8      | 12. 2, 9; 29 |
| 4. 3, 3      | 13. 3, 5     |
| 5. 1, 4; 14  | 14. 27       |
| 6. 2, 8; 28  | 15. 39       |
| 7. 2, 5; 25  | 16. 2, 9     |
| 8. 3, 10; 40 | 17. 4        |
| 9. 3, 5; 35  | 18. 0, 9     |

**Exit Ticket**

Cubes matched to 2<sup>nd</sup> place value chart

Crayons matched to 3<sup>rd</sup> place value chart

Flowers matched to 1<sup>st</sup> place value chart

**Homework**

- |             |                        |
|-------------|------------------------|
| 1. 3, 4; 34 | 9. 3, 9; 39            |
| 2. 2, 3; 23 | 10. 2, 8; 28           |
| 3. 3, 6; 36 | 11. 2, 3               |
| 4. 2, 9; 29 | 12. 32                 |
| 5. 1, 9; 19 | 13. 9                  |
| 6. 2, 6; 26 | 14. 40                 |
| 7. 2, 4; 24 | 15. Answers will vary. |
| 8. 3, 6; 36 |                        |

## Lesson 3

### Problem Set

1. 1, 2, 12
2. 2, 6, 26
3. 3, 7, 37
4. 3, 4, 34
5. 4, 0, 40
6. 1, 10, 20
7. 32 ones
8. 17 ones
9. Picture of 3 tens and 7 ones
10. 40 ones
11. 23 ones
12. 29 ones
13. 1, 5; 15
14. 39; 3, 9

### Exit Ticket

1. 2, 4, 24
2. 3, 8, 38
3. 2, 7; 27

### Homework

1. 2, 3, 23
2. 3, 6, 36
3. 1, 0, 10
4. 3, 8, 38
5. 29; 29
6. 3, 4; 34
7. 38; 38
8. 39; 39
9. 40; 0, 4
10. Answers will vary.

## Lesson 4

### Problem Set

1. 23; 23; 23
2. 20, 8, 28; 28; 28
3. 20, 7; 27; 27; 27
4. 30, 6; 36; 36; 36
5. 20, 5; 25; 25; 25
6. 30, 8; 38; 38; 38
7. 14
8. 2, 3; 20, 23
9. 3, 8; 38, 8
10. 2, 9; 29, 9
11. 40
12.  $20 + 7$
13.  $20 + 3$
14.  $9 + 30$
15.  $30 + 2$

### Exit Ticket

1. 1, 3; 3, 13
2. 3, 4; 30, 34
3. 3, 5; 35, 5
4. 2, 6; 26, 20

### Homework

1. 20, 3, 23; 23; 23
2. 20, 4, 24; 24; 24
3. 2, 7; 27
4. 3, 5; 5, 35
5. 2, 4; 4, 24
6. 3, 8; 30, 8, 38
7. 2 more than 10 is 12.
8. 1 and 30 make 31.
9.  $20 + 4 = 24$
10.  $8 + 30 = 38$

## Lesson 5

### Sprint

#### Side A

- |       |        |        |
|-------|--------|--------|
| 1. 13 | 11. 0  | 21. 10 |
| 2. 12 | 12. 3  | 22. 10 |
| 3. 11 | 13. 4  | 23. 10 |
| 4. 11 | 14. 5  | 24. 18 |
| 5. 14 | 15. 8  | 25. 19 |
| 6. 16 | 16. 1  | 26. 12 |
| 7. 17 | 17. 2  | 27. 14 |
| 8. 18 | 18. 10 | 28. 15 |
| 9. 2  | 19. 10 | 29. 10 |
| 10. 1 | 20. 7  | 30. 3  |

#### Side B

- |       |        |        |
|-------|--------|--------|
| 1. 11 | 11. 2  | 21. 10 |
| 2. 12 | 12. 3  | 22. 10 |
| 3. 13 | 13. 5  | 23. 10 |
| 4. 14 | 14. 7  | 24. 16 |
| 5. 15 | 15. 9  | 25. 18 |
| 6. 16 | 16. 0  | 26. 13 |
| 7. 18 | 17. 1  | 27. 15 |
| 8. 18 | 18. 10 | 28. 15 |
| 9. 0  | 19. 10 | 29. 10 |
| 10. 1 | 20. 3  | 30. 3  |

**Problem Set**

1. 31
2. 29
3. 40
4. 38
5. 37
6. 23
7. 1 more drawn; 29
8. 10 more or quick 10 drawn; 38
9. 1 more drawn; 30
10. 10 more or quick 10 drawn; 39
11. 10 crossed off; 16
12. 1 crossed off; 25
13. 10 crossed off; 30
14. 1 crossed off; 39

**Exit Ticket**

1. 1 more drawn; 25
2. 10 more or quick 10 drawn; 34
3. 10 crossed off; 20
4. 1 crossed off; 29

**Homework**

1. 3 quick tens and 9 ones drawn; 39
2. 4 quick tens and 8 ones drawn; 48
3. 3 quick tens and 6 ones drawn; 36
4. 4 quick tens and 5 ones drawn; 45
5. 23 drawn, 10 crossed off; 13
6. 23 drawn, 1 crossed off; 22
7. 31 drawn, 10 crossed off; 21
8. 31 drawn, 1 crossed off; 30
9. 10 more than 20
10. 1 more than 23 is 24
11. 1 less than 30
12. 10 less than 36

## Lesson 6

### Problem Set

1. 2, 0; 2
2. 1, 4; 1, 4
3. 3, 5; 35
4. 2, 6; 26
5. 0, 6; 6, 0, 6
6. 2, 5; 25, 2, 5
7. 3, 0; 30, 3, 0
8. 3, 4; 3, 4, 34
9. 16; 1 more drawn
10. 15; 10 more drawn
11. 40; 1 dime drawn
12. 31; 1 penny drawn
13. 23; 1 penny crossed off
14. 14; 1 dime crossed off
15. 11; 1 dime crossed off
16. 20; 1 penny crossed off

### Exit Ticket

1. 33; 10 more drawn
2. 14; 1 more drawn
3. 21; 1 dime crossed off
4. 13; 1 penny crossed off

### Homework

1. 3, 0; 3
2. 1, 7; 1, 7
3. 2, 2; 22
4. 3, 3; 33
5. 0, 8; 8, 0, 8
6. 3, 6; 36, 3, 6
7. 1, 6; 16, 1, 6
8. 2, 4; 2, 4, 24
9. 13; 1 more drawn
10. 13; 10 more drawn
11. 32; 1 more dime drawn
12. 23; 1 more penny drawn
13. 38; 1 penny crossed off
14. 29; 1 dime crossed off
15. 23; 1 dime crossed off
16. 32; 1 penny crossed off

## Lesson 7

### Sprint

#### Side A

- |        |        |        |
|--------|--------|--------|
| 1. 6   | 11. 28 | 21. 39 |
| 2. 16  | 12. 18 | 22. 29 |
| 3. 26  | 13. 8  | 23. 19 |
| 4. 15  | 14. 19 | 24. 1  |
| 5. 25  | 15. 29 | 25. 10 |
| 6. 35  | 16. 39 | 26. 10 |
| 7. 7   | 17. 10 | 27. 1  |
| 8. 17  | 18. 20 | 28. 24 |
| 9. 27  | 19. 30 | 29. 24 |
| 10. 37 | 20. 40 | 30. 34 |

#### Side B

- |        |        |        |
|--------|--------|--------|
| 1. 5   | 11. 27 | 21. 39 |
| 2. 15  | 12. 17 | 22. 29 |
| 3. 25  | 13. 7  | 23. 19 |
| 4. 16  | 14. 18 | 24. 1  |
| 5. 26  | 15. 28 | 25. 10 |
| 6. 36  | 16. 38 | 26. 10 |
| 7. 6   | 17. 10 | 27. 1  |
| 8. 16  | 18. 20 | 28. 29 |
| 9. 26  | 19. 30 | 29. 29 |
| 10. 36 | 20. 40 | 30. 39 |

**Problem Set**

1. 13, 19; set of 19 circled
2. 36, 13; set of 36 circled
3. 30, 29; set of 30 circled
4. 30, 32; set of 32 circled
5.
  - a. 3 tens 2 ones
  - b. 3 tens 2 ones
  - c. 19
  - d. 31
6. Set of 3 dimes circled
7. 13, 19; set of 13 circled
8. 14, 11; set of 11 circled
9. 11, 20; set of 11 circled
10. 40, 26; set of 26 circled
11.
  - a. 1 ten 5 ones
  - b. 28 ones
  - c. 13
  - d. 26
12. Set of 1 dime 2 pennies circled
13. 17 circled; explanations will vary

**Exit Ticket**

1. 34, 25; set of 34 circled; 34, 25
2. 24, 34; set of 24 circled; 24, 34
3. Set of 2 dimes circled
4. Set of 1 dime and 4 pennies circled

**Homework**

1. 22, 14; set of 22 circled
2. 13, 23; set of 23 circled
3. 3 tens 9 ones circled
4. 35 circled
5. 31, 24; set of 24 circled
6. 28, 38; set of 28 circled
7. 2 tens 7 ones circled
8. 22 circled
9. Set of 1 dime and 3 pennies circled
10. Set of 2 dimes circled
11.
  - a. 24 circled; 24 is less than 27
  - b. 32 circled; 32 is greater than 22
  - c. 26 circled; 26 is less than 29
  - d. It would be a tie; drawings showing 39.

## Lesson 8

### Core Subtraction Fluency Review

1.	8	16.	6	31.	0
2.	7	17.	7	32.	1
3.	0	18.	6	33.	2
4.	0	19.	8	34.	3
5.	1	20.	2	35.	4
6.	2	21.	3	36.	5
7.	3	22.	4	37.	4
8.	2	23.	0	38.	5
9.	7	24.	0	39.	3
10.	6	25.	1	40.	2
11.	5	26.	0	41.	4
12.	0	27.	1	42.	3
13.	1	28.	0	43.	2
14.	1	29.	1	44.	3
15.	5	30.	1	45.	2

### Problem Set

1. a. G; is greater than  
b. L; is less than  
c. G; is greater than  
d. L; is less than
2. is equal to; is less than; is greater than; is less than; is greater than; is greater than; is less than
3. 9, 13, 23, 32, 40
4. 40, 32, 23, 13, 9
5. Answers will vary.

**Exit Ticket**

1. 40, 39, 30, 29
2. is less than; is equal to; is greater than

**Homework**

1. a. is less than  
b. is equal to  
c. is greater than  
d. is greater than  
e. is less than
2. 32, 29, 4 tens circled
3. 29, 3 tens, 13 circled
4. 23, 29, 30, 32; 27 goes between 23 and 29
5. 40, 31, 30, 13; 23 goes between 13 and 30
6. Answers will vary.

## Lesson 9

## Problem Set



## Exit Ticket

- |              |              |              |
|--------------|--------------|--------------|
| a. $12 > 10$ | b. $13 > 3$  | c. $21 > 12$ |
| d. $22 < 24$ | e. $28 > 27$ | f. $13 < 31$ |
| g. $25 > 17$ | h. $21 < 30$ | i. $23 < 32$ |

# Homework

1. a.  $20 > 10$       b.  $15 < 17$       c.  $24 > 22$       d.  $30 > 29$       e.  $38 < 39$       f.  $39 < 40$

2. Answers will vary.

3. a. is less than  
b. is greater than  
c. is greater than  
d. is less than  
e. is less than  
f. is less than  
g. is less than

## Lesson 10

### Sprint

#### Side A

- |        |        |        |
|--------|--------|--------|
| 1. 3   | 11. 9  | 21. 36 |
| 2. 13  | 12. 10 | 22. 24 |
| 3. 23  | 13. 9  | 23. 19 |
| 4. 7   | 14. 18 | 24. 30 |
| 5. 17  | 15. 13 | 25. 15 |
| 6. 37  | 16. 14 | 26. 35 |
| 7. 30  | 17. 25 | 27. 6  |
| 8. 32  | 18. 26 | 28. 12 |
| 9. 35  | 19. 17 | 29. 6  |
| 10. 10 | 20. 9  | 30. 20 |

#### Side B

- |        |        |        |
|--------|--------|--------|
| 1. 4   | 11. 8  | 21. 39 |
| 2. 14  | 12. 9  | 22. 21 |
| 3. 24  | 13. 8  | 23. 29 |
| 4. 7   | 14. 17 | 24. 20 |
| 5. 17  | 15. 15 | 25. 15 |
| 6. 27  | 16. 12 | 26. 35 |
| 7. 30  | 17. 23 | 27. 6  |
| 8. 33  | 18. 25 | 28. 10 |
| 9. 36  | 19. 14 | 29. 10 |
| 10. 10 | 20. 7  | 30. 22 |

**Problem Set**

1. a.  $>$   
b.  $>$   
c.  $<$   
d.  $<$   
e.  $>$   
f.  $>$   
g.  $>$   
h.  $>$   
i.  $<$
2. a. is equal to;  $36 = 36$   
b. is less than;  $14 < 17$   
c. is less than;  $24 < 34$   
d. is equal to;  $20 = 20$   
e. is greater than;  $31 > 13$   
f. is less than;  $12 < 21$   
g. is greater than;  $17 > 13$   
h. is equal to;  $30 = 30$

**Exit Ticket**

- a. is greater than;  $29 > 26$   
b. is less than;  $18 < 19$   
c. is less than;  $29 < 40$   
d. is less than;  $39 < 40$

**Homework**

- a.  $>$ ; is greater than  
b.  $<$ ; is less than  
c.  $=$ ; is equal to  
d.  $<$ ; is less than  
e.  $>$ ; is greater than  
f.  $>$ ; is greater than  
g.  $>$ ; is greater than  
h.  $=$ ; is equal to
- i.  $>$ ; is greater than  
j.  $<$ ; is less than  
k.  $>$ ; is greater than  
l.  $=$ ; is equal to  
m.  $<$ ; is less than  
n.  $<$ ; is less than  
o.  $<$ ; is less than  
p.  $>$ ; is greater than

## Lesson 11

### Problem Set

1. Answer provided.
2.  $10, 10; 1, 1, 2; 10 + 10 = 20$
3.  $20, 20, 40; 4, 2, 2; 40 = 20 + 20$
4.  $10, 20, 30; 3, 2, 1; 30 = 20 + 10$
5.  $10, 20, 30; 3, 1, 2; 30 - 10 = 20$
6.  $10, 10, 20; 2, 2, 0; 20 - 20 = 0$
7.  $10, 20, 30; 2, 1, 3; 20 + 10 = 30$
8.  $10, 30, 40; 4, 1, 3; 40 - 10 = 30$
9.  $10, 20, 30; 3, 2, 1; 30 - 20 = 10$
10.  $0, 10, 10; 1, 0, 1; 10 - 0 = 10$
11. a. 2 tens;  $20 + 20 = 40$   
b. 10;  $30 + 10 = 40$   
c. 10; 2 tens + 1 ten = 3 tens
12. a. 40  
b. 10  
c. 30  
d. 20  
e. 30  
f. Answers will vary.

### Exit Ticket

1.  $10, 10; 2; 10 + 10$
2.  $10, 20, 30; 3, 2, 1; 30, 20, 10$
3.  $20, 10, 30; 3, 1, 2; 30, 10, 20$
4.  $20, 20, 40; 4, 2, 2; 40, 20, 20$

### Homework

1. Answer provided.
2.  $10, 20, 30; 3, 1, 2; 30 = 10 + 20$
3.  $10, 20, 30; 3, 1, 2; 30 - 10 = 20$
4.  $20, 20, 40; 4, 2, 2; 40 - 20 = 20$
5.  $0, 40, 40; 4, 4, 0; 40 - 40 = 0$
6.  $20, 20, 40; 2, 2, 4; 20 + 20 = 40$
7. Quick tens drawn;  $10, 20, 30; 30$
8. Quick tens drawn;  $10, 20, 30; 20$
9. Quick tens drawn;  $10, 10, 20; 10$
10. Quick tens drawn;  $10, 30, 40; 40$
11. 3 tens
12. 40
13. 30
14. 30
15. 1 ten
16. 10
17. 0
18. 40
19. 10

## Lesson 12

### Sprint

#### Side A

- |       |       |       |
|-------|-------|-------|
| 1. 1  | 11. 4 | 21. 3 |
| 2. 3  | 12. 2 | 22. 3 |
| 3. 3  | 13. 3 | 23. 5 |
| 4. 1  | 14. 3 | 24. 6 |
| 5. 2  | 15. 3 | 25. 3 |
| 6. 3  | 16. 4 | 26. 3 |
| 7. 3  | 17. 3 | 27. 6 |
| 8. 2  | 18. 3 | 28. 3 |
| 9. 2  | 19. 4 | 29. 3 |
| 10. 4 | 20. 5 | 30. 9 |

#### Side B

- |       |       |        |
|-------|-------|--------|
| 1. 0  | 11. 5 | 21. 2  |
| 2. 4  | 12. 1 | 22. 2  |
| 3. 4  | 13. 4 | 23. 6  |
| 4. 0  | 14. 2 | 24. 7  |
| 5. 1  | 15. 2 | 25. 2  |
| 6. 4  | 16. 5 | 26. 2  |
| 7. 4  | 17. 2 | 27. 7  |
| 8. 1  | 18. 2 | 28. 3  |
| 9. 1  | 19. 5 | 29. 3  |
| 10. 5 | 20. 6 | 30. 11 |

**Problem Set**

- |  |                      |
|--|----------------------|
| 1. 32  | 7. 23                |
| 2. 10, 25; 10, 15, 25                              | 8. 20                |
| 3. 18, 20, 38; 18, 20, 38                          | 9. 16                |
| 4. 29, 10, 39; 10, 29, 39                          | 10. 18               |
| 5. Quick tens and ones drawn; 10, 19, 29; 2, 9; 29 | 11. 2, 3; 1, 0; 3, 3 |
| 6. Quick tens and ones drawn; 14, 20, 34; 3, 4; 34 | 12. 1, 6; 2, 0; 3, 6 |

**Exit Ticket**

38; quick tens, the arrow way, or coins drawn

34; quick tens, the arrow way, or coins drawn

**Homework**

- |  |                      |
|--|----------------------|
| 1. 33; 13, 20, 33                                | 7. 29                |
| 2. 20, 37; 17, 20, 37                            | 8. 39                |
| 3. 10, 28, 38; 10, 28, 38                        | 9. 28                |
| 4. 30, 19, 49; 19, 30, 49                        | 10. 11               |
| 5. Quick tens/ones drawn; 10, 17, 27; 10, 17, 27 | 11. 1, 8; 2, 0; 3, 8 |
| 6. Quick tens/ones drawn; 19, 20, 39; 19, 20     |                      |

## Lesson 13

### Problem Set

1. 2, 8; 28
2. 3, 0; 27; 30
3. 1, 8; 6; 18
4. 2, 0; 16, 4, 20
5. Quick ten drawing; 3, 0; 30
6. Quick ten drawing; 2, 7; 27
7. 20, 1; 30; 3, 0; quick ten drawing
8. 20, 1; 28; 2, 8; quick ten drawing
9. 10, 3; 20; 2, 0; quick ten drawing
10. 20, 6; 30; 3, 0; quick ten drawing
11. 30, 2; 35; 3, 5; quick ten drawing
12. 30, 8; 40; 4, 0; quick ten drawing

### Exit Ticket

1. 3, 5; 32, 3, 35
2. 3, 0; 26, 4, 30
3. 30, 3; 39; 3, 9; quick ten drawing
4. 20, 3; 30; 3, 0; quick ten drawing

### Homework

1. 2, 5; 25
2. Quick ten drawing; 2, 9; 29
3. Quick ten drawing; 2, 9; 29
4. Quick ten drawing; 3, 0; 30
5. Quick ten drawing; 3, 6; 36
6. Quick ten drawing; 4, 0; 40
7. 20, 6; 28; 2, 8; quick ten drawing
8. 30, 6; 39; 3, 9; quick ten drawing
9. 20, 6; 30; 3, 0; quick ten drawing
10. 20, 4; 30; 3, 0; quick ten drawing
11. a. 29  
b. 30  
c. 40

## Lesson 14

### Problem Set

1. 19; 1, 9
2. 20; 2, 0
3. 23; 2, 3
4. 30; 3, 0; quick ten drawing
5. 32; 3, 2; quick ten drawing
6. 35; 3, 5; quick ten drawing
7. 20; 2, 0; quick ten drawing
8. 22; 2, 2; quick ten drawing
9. 32; 3, 2; quick ten drawing
10. 10, 7; 19; 1, 9; work shown may vary
11. 3, 2; 22; 2, 2; work shown may vary
12. 20, 5; 29; 2, 9; work shown may vary
13. 5, 1; 31; 3, 1; work shown may vary
14. 30, 4; 38; 3, 8; work shown may vary
15. 42; 4, 2; work shown may vary

### Exit Ticket

1. Quick ten drawing; 18; 1, 8
2. Quick ten drawing; 20; 2, 0
3. Quick ten drawing; 23; 2, 3
4. 30, 2; 39; 3, 9
5. 20, 6; 35; 3, 5

### Homework

1. 18; 1, 8
2. 20; 2, 0
3. 21; 2, 1
4. 30; 3, 0; quick ten drawing
5. 32; 3, 2; quick ten drawing
6. 35; 3, 5; quick ten drawing
7. 20; 2, 0; quick ten drawing
8. 24; 2, 4; quick ten drawing
9. 34; 3, 4; quick ten drawing
10. 10, 3; 19; 1, 9; work shown may vary
11. 10, 3; 20; 2, 0; work shown may vary
12. 20, 5; 30; 3, 0; work shown may vary
13. 20, 5; 33; 3, 3; work shown may vary
14. 20, 4; 32; 3, 2; work shown may vary
15. 20, 3; 32; 3, 2; work shown may vary

# Lesson 15

## Problem Set



## Exit Ticket

- |    |       |  |  |    |       |
|----|-------|--|--|----|-------|
| 1. | a. 12 |  |  | 3. | a. 13 |
|    | b. 22 |  |  |    | b. 23 |
|    | c. 32 |  |  |    | c. 33 |
| 2. | a. 8  |  |  |    |       |
|    | b. 18 |  |  |    |       |
|    | c. 28 |  |  |    |       |
|    | d. 38 |  |  |    |       |

**Homework**

1. 9  
2. 19  
3. 29  
4. 39  
5. 12  
6. 22  
7. 32  
8. a. 7  
b. 17  
c. 27  
d. 37  
9. a. 10  
b. 20  
c. 30  
d. 40
10. a. 9  
b. 19  
c. 29  
11. a. 11  
b. 21  
c. 31  
12. a. 15  
b. 25  
c. 35  
13. a. 12  
b. 22  
c. 32  
14.  $29; 4 + 5 = 9$   
15.  $31; 4 + 7 = 11$

## Lesson 16

### Problem Set

1. Quick ten drawing; 19
2. Quick ten drawing; 20
3. Quick ten drawing; 38
4. Quick ten drawing; 39
5. Quick ten drawing; 17
6. Quick ten drawing; 36
7. Quick ten drawing; 30
8. Quick ten drawing; 20
9. Written notation; 39
10. Written notation; 33
11. Written notation; 40
12. Written notation; 40
13. Written notation; 38
14. Written notation; 34
15. Drawing of dimes and pennies; 36; 29

### Exit Ticket

1. Quick ten drawing; 29
2. Quick ten drawing; 34
3. 10, 9; 39
4. 30, 6; 39
5. Drawing of 3 dimes and 3 pennies; 33

### Homework

1. Quick ten drawing; 19
2. Quick ten drawing; 20
3. Quick ten drawing; 17
4. Quick ten drawing; 34
5. Written notation; 30
6. Written notation; 34
7. a. 23; 2 dimes and 3 pennies  
b. 19;  $13 + 6$   
c.  $29; 26 \xrightarrow{+3} 29$   
d. 40; quick ten drawing  
e. 32; 3 dimes and 2 pennies

## Lesson 17

### Core Addition Fluency

- |       |       |       |
|-------|-------|-------|
| 1. 0  | 16. 1 | 31. 0 |
| 2. 1  | 17. 6 | 32. 9 |
| 3. 3  | 18. 7 | 33. 8 |
| 4. 2  | 19. 0 | 34. 7 |
| 5. 5  | 20. 4 | 35. 2 |
| 6. 4  | 21. 3 | 36. 3 |
| 7. 5  | 22. 4 | 37. 4 |
| 8. 6  | 23. 3 | 38. 6 |
| 9. 0  | 24. 2 | 39. 5 |
| 10. 1 | 25. 6 | 40. 6 |
| 11. 3 | 26. 5 | 41. 5 |
| 12. 2 | 27. 8 | 42. 4 |
| 13. 4 | 28. 0 | 43. 7 |
| 14. 5 | 29. 1 | 44. 9 |
| 15. 2 | 30. 7 | 45. 8 |

### Problem Set

- |  |   |
|--|---|
| 1. 26; quick ten or number bond drawings | 9. 36; quick ten or number bond drawings  |
| 2. 35; quick ten or number bond drawings | 10. 30; quick ten or number bond drawings |
| 3. 19; quick ten or number bond drawings | 11. a. 30                                 |
| 4. 35; quick ten or number bond drawings | b. 32                                     |
| 5. 23; quick ten or number bond drawings | c. 39                                     |
| 6. 33; quick ten or number bond drawings | d. 38                                     |
| 7. 30; quick ten or number bond drawings | e. 32                                     |
| 8. 40; quick ten or number bond drawings | f. 36                                     |

**Exit Ticket**

1. 25; quick ten or number bond drawings
2. 35; quick ten or number bond drawings
3. 34; quick ten or number bond drawings
4. 39; quick ten or number bond drawings

**Homework**

1. 33; quick ten or number bond drawings
2. 29; quick ten or number bond drawings
3. 33; quick ten or number bond drawings
4. 34; quick ten or number bond drawings
5. 33; quick ten or number bond drawings
6. 37; quick ten or number bond drawings
7. Answers will vary.
8. 32; quick ten or number bond drawings
9. 34; quick ten or number bond drawings
10. 34; quick ten or number bond drawings
11. 38; quick ten or number bond drawings
12. 37; quick ten or number bond drawings
13. 38; quick ten or number bond drawings
14. Answers will vary.

## Lesson 18

### Problem Set

1. a. +7, +1 added over arrows  
b. 7, 1 added to number bond  
c. X to the right of the drawing
2. a. Circled  
b. Circled  
c. Not circled  
d. +3 changed to +4, +2 changed to +1; 22  
e. changed to 21
3. a. Not circled  
b. Circled  
c. Circled  
d. Quick tens added together; 15 changed to  
e. 33
4. 22; varied notation

### Exit Ticket

1. a. Circled  
b. Not circled  
c. Circled  
d. Circle 10 dots

### Homework

1. Yes, both are correct. Explanations will vary.
2. No, the first solution added 11 dots instead of 9.
3. Students B and Student C worked the problem correctly. Quick ten drawing is made for  $19 + 6$ .

## Lesson 19

### Sprint

#### Side A

- |       |        |        |
|-------|--------|--------|
| 1. 7  | 11. 18 | 21. 10 |
| 2. 17 | 12. 28 | 22. 20 |
| 3. 27 | 13. 9  | 23. 30 |
| 4. 7  | 14. 19 | 24. 11 |
| 5. 17 | 15. 29 | 25. 21 |
| 6. 27 | 16. 9  | 26. 31 |
| 7. 8  | 17. 19 | 27. 13 |
| 8. 18 | 18. 29 | 28. 23 |
| 9. 28 | 19. 9  | 29. 5  |
| 10. 8 | 20. 19 | 30. 8  |

#### Side B

- |       |        |        |
|-------|--------|--------|
| 1. 6  | 11. 18 | 21. 10 |
| 2. 16 | 12. 28 | 22. 20 |
| 3. 26 | 13. 7  | 23. 30 |
| 4. 6  | 14. 17 | 24. 11 |
| 5. 16 | 15. 27 | 25. 21 |
| 6. 26 | 16. 9  | 26. 31 |
| 7. 8  | 17. 19 | 27. 14 |
| 8. 18 | 18. 29 | 28. 24 |
| 9. 28 | 19. 8  | 29. 5  |
| 10. 8 | 20. 18 | 30. 9  |

**Problem Set**

1. 13;  $6 + 7 = 13$ ; labeled tape diagram
2. 12;  $6 + 6 = 12$ ; labeled tape diagram
3. 15;  $12 + 3 = 15$ ; labeled tape diagram
4. 17;  $13 + 4 = 17$ ; labeled tape diagram
5. 18;  $6 + 12 = 18$ ; labeled tape diagram
6. 20;  $13 + 7 = 20$ ; labeled tape diagram

**Exit Ticket**

1. 20;  $14 + 6 = 20$ ; labeled tape diagram

**Homework**

1. 17;  $4 + 13 = 17$ ; labeled tape diagram
2. 20;  $14 + 6 = 20$ ; labeled tape diagram
3. 13;  $7 + 6 = 13$ ; labeled tape diagram
4. 18;  $13 + 5 = 18$ ; labeled tape diagram

## Lesson 20

### Problem Set

1. 2;  $9 + \underline{2} = 11$  or  $11 - 9 = \underline{2}$ ; labeled tape diagram
2. 8;  $8 + \underline{8} = 16$  or  $16 - 8 = \underline{8}$ ; labeled tape diagram
3. 16;  $13 + 3 = \underline{16}$ ; labeled tape diagram
4. 10;  $3 + \underline{10} = 13$  or  $13 - 3 = \underline{10}$ ; labeled tape diagram
5. 12;  $6 + 6 = \underline{12}$ ; labeled tape diagram
6. 4;  $14 + \underline{4} = 18$  or  $18 - 14 = \underline{4}$ ; labeled tape diagram

### Exit Ticket

6;  $6 + \underline{6} = 12$  or  $12 - 6 = \underline{6}$ ; labeled tape diagram

### Homework

1. 6;  $6 + \underline{6} = 12$  or  $12 - 6 = \underline{6}$ ; labeled tape diagram
2. 9;  $7 + \underline{9} = 16$  or  $16 - 7 = \underline{9}$ ; labeled tape diagram
3. 20;  $9 + 11 = \underline{20}$ ; with labeled tape diagram
4. 3;  $13 + \underline{3} = 16$  or  $16 - 13 = \underline{3}$ ; labeled tape diagram

## Lesson 21

### Problem Set

1. 18;  $7 + 11 = \underline{18}$ ; labeled tape diagram
2. 11;  $7 + \underline{11} = 18$  or  $18 - 7 = \underline{11}$ ; labeled tape diagram
3. 5;  $14 + \underline{5} = 19$  or  $19 - 14 = \underline{5}$ ; labeled tape diagram
4. 18;  $14 + 4 = \underline{18}$ ; labeled tape diagram
5. 3;  $15 + \underline{3} = 18$  or  $18 - 15 = \underline{3}$ ; labeled tape diagram
6. 13;  $4 + \underline{13} = 17$  or  $17 - 4 = \underline{13}$ ; labeled tape diagram

### Exit Ticket

1. 7;  $6 + \underline{7} = 13$  or  $13 - 6 = \underline{7}$ ; labeled tape diagram

### Homework

1. 18;  $12 + 6 = \underline{18}$ ; labeled tape diagram
2. 7;  $7 + \underline{7} = 14$  or  $14 - 7 = \underline{7}$ ; labeled tape diagram
3. 5;  $13 + \underline{5} = 18$  or  $18 - 13 = \underline{5}$ ; labeled tape diagram
4. 17;  $8 + 9 = \underline{17}$ ; labeled tape diagram

## Lesson 22

### Sprint

#### Side A

- |       |        |        |
|-------|--------|--------|
| 1. 4  | 11. 9  | 21. 2  |
| 2. 2  | 12. 5  | 22. 2  |
| 3. 2  | 13. 5  | 23. 6  |
| 4. 6  | 14. 4  | 24. 6  |
| 5. 3  | 15. 5  | 25. 7  |
| 6. 3  | 16. 6  | 26. 7  |
| 7. 3  | 17. 2  | 27. 9  |
| 8. 4  | 18. 2  | 28. 9  |
| 9. 4  | 19. 6  | 29. 19 |
| 10. 3 | 20. 11 | 30. 29 |

#### Side B

- |       |        |        |
|-------|--------|--------|
| 1. 6  | 11. 7  | 21. 5  |
| 2. 3  | 12. 3  | 22. 5  |
| 3. 3  | 13. 3  | 23. 7  |
| 4. 8  | 14. 4  | 24. 7  |
| 5. 4  | 15. 4  | 25. 8  |
| 6. 4  | 16. 7  | 26. 8  |
| 7. 5  | 17. 2  | 27. 8  |
| 8. 4  | 18. 2  | 28. 8  |
| 9. 4  | 19. 7  | 29. 18 |
| 10. 5 | 20. 14 | 30. 28 |

**Problem Set**

1. Answers will vary.
2. Answers will vary.
3. Answers will vary.
4. Answers will vary.

**Exit Ticket**

- a. and c. circled

**Homework**

1. Answers will vary.
2. Answers will vary.

## Lesson 23

### Core Fluency Practice

#### Set A

- |       |        |        |
|-------|--------|--------|
| 1. 6  | 11. 8  | 21. 8  |
| 2. 6  | 12. 8  | 22. 9  |
| 3. 6  | 13. 6  | 23. 10 |
| 4. 6  | 14. 7  | 24. 10 |
| 5. 7  | 15. 8  | 25. 8  |
| 6. 7  | 16. 9  | 26. 7  |
| 7. 8  | 17. 10 | 27. 10 |
| 8. 7  | 18. 9  | 28. 9  |
| 9. 7  | 19. 9  | 29. 10 |
| 10. 6 | 20. 10 | 30. 9  |

#### Set B

- |       |       |       |
|-------|-------|-------|
| 11. 0 | 11. 3 | 21. 3 |
| 12. 6 | 12. 4 | 22. 4 |
| 13. 1 | 13. 5 | 23. 5 |
| 14. 2 | 14. 4 | 24. 6 |
| 15. 7 | 15. 2 | 25. 7 |
| 16. 1 | 16. 3 | 26. 8 |
| 17. 6 | 17. 4 | 27. 7 |
| 18. 1 | 18. 2 | 28. 6 |
| 19. 7 | 19. 3 | 29. 5 |
| 20. 2 | 20. 4 | 30. 6 |

**Set C**

- |       |       |       |
|-------|-------|-------|
| 1. 1  | 11. 3 | 21. 4 |
| 2. 5  | 12. 3 | 22. 4 |
| 3. 5  | 13. 2 | 23. 3 |
| 4. 1  | 14. 2 | 24. 3 |
| 5. 9  | 15. 3 | 25. 4 |
| 6. 1  | 16. 3 | 26. 4 |
| 7. 5  | 17. 2 | 27. 3 |
| 8. 5  | 18. 2 | 28. 3 |
| 9. 2  | 19. 3 | 29. 3 |
| 10. 2 | 20. 3 | 30. 3 |

**Set D**

- |       |       |       |
|-------|-------|-------|
| 1. 6  | 11. 3 | 21. 4 |
| 2. 5  | 12. 4 | 22. 5 |
| 3. 6  | 13. 6 | 23. 3 |
| 4. 7  | 14. 2 | 24. 4 |
| 5. 4  | 15. 4 | 25. 5 |
| 6. 5  | 16. 6 | 26. 4 |
| 7. 7  | 17. 5 | 27. 3 |
| 8. 0  | 18. 1 | 28. 2 |
| 9. 1  | 19. 2 | 29. 3 |
| 10. 3 | 20. 2 | 30. 2 |

**Set E**

- |       |       |       |
|-------|-------|-------|
| 1. 6  | 11. 4 | 21. 3 |
| 2. 4  | 12. 4 | 22. 5 |
| 3. 3  | 13. 2 | 23. 3 |
| 4. 7  | 14. 2 | 24. 7 |
| 5. 2  | 15. 2 | 25. 2 |
| 6. 7  | 16. 3 | 26. 7 |
| 7. 3  | 17. 4 | 27. 2 |
| 8. 4  | 18. 2 | 28. 3 |
| 9. 9  | 19. 6 | 29. 5 |
| 10. 5 | 20. 2 | 30. 3 |

**Problem Set**

1. a. 3 tens, 4 ones; 2 tens 14 ones  
b. 3 tens, 9 ones; 2 tens, 19 ones  
c. 2 tens, 20 ones; 4 tens, 0 ones  
d. 2 tens, 13 ones; 1 ten, 23 ones
2. a. 1 ten, 12 ones  
b. 3 tens, 6 ones  
c. 3 tens, 4 ones
3. a, c, and d should be checked.
4. Quick ten drawing showing both are correct

**Exit Ticket**

1. a. 3 tens, 2 ones  
b. 1 ten, 18 ones
- c. 2 tens, 16 ones

**Homework**

1. a. 2 tens, 3 ones; 1 ten, 13 ones  
b. 3 tens, 4 ones; 2 tens, 14 ones  
c. 3 tens, 8 ones; 1 ten, 28 ones  
d. 3 tens, 7 ones; 2 tens, 17 ones
2. a. 3 tens, 8 ones  
b. 2 tens, 6 ones  
c. 2 tens, 1 one
3. a, b, and c should be checked
4. Quick tens drawing showing Emi is correct

## Lesson 24

### Problem Set

1. a. 27  
b. 37; 34; 34, 37  
c. 29; 26; 26, 29  
d. 39; 36; 36, 3, 39  
e. 30; 15, 10, 25; 25, 5, 30  
f. 10, 5; 40; 25, 10, 35; 35, 5, 40
2. a. 28; number bonds or arrow way shown  
b. 37; number bonds or arrow way shown  
c. 30; number bonds or arrow way shown  
d. 40; number bonds or arrow way shown  
e. 38; number bonds or arrow way shown  
f. 40; number bonds or arrow way shown  
g. 39; number bonds or arrow way shown  
h. 30; number bonds or arrow way shown

### Exit Ticket

1. 10, 3; 39; 26, 10, 36; 36, 3, 39
2. 10, 9; 40; 21, 10, 31; 31, 9, 40

### Homework

1. a. 29  
b. 39; 33; 33, 39  
c. 30; 26; 26, 30  
d. 40; 36; 36, 4, 40  
e. 30; 17, 10, 27; 27, 3, 30  
f. 10, 3; 40; 27, 10, 37; 37, 3, 40
2. a. 27; 24; 24, 27  
b. 10, 4, 38; 24, 10, 34; 34, 4, 38  
c. 10, 4, 29; 15, 10, 25; 25, 4, 29  
d. 10, 5, 39; 24, 10, 34; 34, 5, 39  
e. 10, 7, 39; 22, 10, 32; 32, 7, 39  
f. 10, 2, 39; 27, 10, 37; 37, 2, 39  
g. 10, 2, 30; 18, 10, 28; 28, 2, 30  
h. 10, 2, 40; 28, 10, 38; 38, 2, 40

## Lesson 25

### Sprint Core Fluency

#### Side A

- |       |       |       |
|-------|-------|-------|
| 1. 5  | 11. 8 | 21. 9 |
| 2. 1  | 12. 2 | 22. 7 |
| 3. 0  | 13. 9 | 23. 7 |
| 4. 10 | 14. 8 | 24. 6 |
| 5. 2  | 15. 7 | 25. 6 |
| 6. 3  | 16. 1 | 26. 4 |
| 7. 4  | 17. 1 | 27. 8 |
| 8. 6  | 18. 5 | 28. 8 |
| 9. 7  | 19. 5 | 29. 2 |
| 10. 3 | 20. 9 | 30. 9 |

#### Side B

- |       |       |        |
|-------|-------|--------|
| 1. 0  | 11. 8 | 21. 2  |
| 2. 10 | 12. 2 | 22. 8  |
| 3. 1  | 13. 9 | 23. 8  |
| 4. 5  | 14. 1 | 24. 7  |
| 5. 4  | 15. 8 | 25. 7  |
| 6. 3  | 16. 5 | 26. 3  |
| 7. 2  | 17. 5 | 27. 6  |
| 8. 8  | 18. 1 | 28. 4  |
| 9. 7  | 19. 1 | 29. 2  |
| 10. 3 | 20. 2 | 30. 28 |

**Problem Set**

1. a. 25; 10, 1,  $14 + 10 = 24$ ;  $24 + 1 = 25$   
     b. 35; 10, 4,  $21 + 10 = 31$ ;  $31 + 4 = 35$   
     c. 29; 10, 4,  $15 + 10 = 25$ ;  $25 + 4 = 29$   
     d. 40; 10, 4,  $26 + 10 = 36$ ;  $36 + 4 = 40$   
     e. 39; 10, 3,  $26 + 10 = 36$ ;  $36 + 3 = 39$   
     f. 37; 10, 3,  $24 + 10 = 34$ ;  $34 + 3 = 37$
2. a. 40; 1, 10;  $29 + 1 = 30$ ;  $30 + 10 = 40$   
     b. 30; 3, 10;  $17 + 3 = 20$ ;  $20 + 10 = 30$   
     c. 30; 6, 10;  $14 + 6 = 20$ ;  $20 + 10 = 30$   
     d. 39; 3, 10;  $26 + 3 = 29$ ;  $29 + 10 = 39$   
     e. 39; 1, 10;  $28 + 1 = 29$ ;  $29 + 10 = 39$   
     f. 39; 10, 2;  $27 + 2 = 29$ ;  $29 + 10 = 39$   
     g. 30; 2, 10;  $18 + 2 = 20$ ;  $20 + 10 = 30$   
     h. 40; 8, 10;  $22 + 8 = 30$ ;  $30 + 10 = 40$

**Exit Ticket**

- a. 39; varied number bonds and sentences  
     b. 40; varied number bonds and sentences

**Homework**

1. a. 26; 10, 2,  $14 + 10 = 24$ ;  $24 + 2 = 26$   
     b. 35; 10, 4,  $21 + 10 = 31$ ;  $31 + 4 = 35$   
     c. 29; 10, 4,  $15 + 10 = 25$ ;  $25 + 4 = 29$   
     d. 39; 10, 4,  $25 + 10 = 35$ ;  $35 + 4 = 39$   
     e. 39; 10, 6,  $23 + 10 = 33$ ;  $33 + 6 = 39$   
     f. 40; 10, 6,  $24 + 10 = 34$ ;  $34 + 6 = 40$
2. a. 37;  $27 + 10 = 37$   
     b. 40; 3, 10;  $27 + 3 = 30$ ;  $30 + 10 = 40$   
     c. 39; 3, 10;  $26 + 3 = 29$ ;  $29 + 10 = 39$   
     d. 40; 4, 10;  $26 + 4 = 30$ ;  $30 + 10 = 40$   
     e. 30; 2, 10;  $18 + 2 = 20$ ;  $20 + 10 = 30$   
     f. 39; 10, 8;  $21 + 8 = 29$ ;  $29 + 10 = 39$   
     g. 30; 1, 10;  $19 + 1 = 20$ ;  $20 + 10 = 30$   
     h. 40; 9, 10;  $21 + 9 = 30$ ;  $30 + 10 = 40$

## Lesson 26

### Problem Set

1. a. 32  
b. 31  
c. 34; 29; 29, 34  
d. 33; 28; 28, 33  
e. 32; 29; 29, 3, 32  
f. 35; 29; 29, 6, 35
2. a. 33  
b. 31  
c. 32; 20; 32  
d. 34; 20; 20, 34  
e. 32; 17, 20; 20, 32  
f. 35; 18, 2, 20; 20, 15, 35

### Exit Ticket

1. a.  $10, 5; 34; 19 + 10 = 29; 29 + 5 = 34$   
b.  $10, 7; 36; 19 + 10 = 29; 29 + 7 = 36$
2. a.  $14, 1; 34; 19 + 1 = 20; 20 + 14 = 34$   
b.  $1, 16; 36; 19 + 1 = 20; 20 + 16 = 36$

### Homework

1. a. 31  
b. 32  
c. 32; 27; 27, 32  
d. 33; 27; 27, 33  
e. 31; 27; 27, 4, 31  
f. 36; 29; 29, 7, 36
2. a. 32  
b. 33  
c. 33; 20; 33  
d. 35; 20; 20, 35  
e. 37; 19, 20; 20, 37  
f. 38; 19, 1, 20; 20, 18, 38

## Lesson 27

### Problem Set

- |          |          |
|----------|----------|
| 1. a. 31 | 2. a. 31 |
| b. 30    | b. 31    |
| c. 32    | c. 32    |
| d. 32    | d. 33    |
| e. 31    | e. 35    |
| f. 34    | f. 32    |
| g. 35    | g. 38    |
| h. 37    | h. 36    |

### Exit Ticket

1. a. 31  
b. 30  
c. 32  
d. 32

### Homework

- |          |          |
|----------|----------|
| 1. a. 31 | 2. a. 33 |
| b. 31    | b. 36    |
| c. 32    | c. 35    |
| d. 31    | d. 32    |
| e. 33    | e. 31    |
| f. 34    | f. 31    |
| g. 34    | g. 38    |
| h. 35    | h. 36    |

## Lesson 28

### Problem Set

1. a. 35; work shown  
b. 30; work shown; rectangle checked to indicate new ten  
c. 40; work shown; rectangle checked to indicate new ten  
d. 29; work shown  
e. 40; work shown; rectangle checked to indicate new ten  
f. 33; work shown; rectangle checked to indicate new ten
2. a. 28  
b. 38  
c. 38  
d. 40  
e. 32  
f. 36  
g. 40  
h. 35

### Exit Ticket

- a. 28; work shown  
b. 40; work shown  
c. 34; work shown  
d. 36; work shown

### Homework

- a. 29; work shown  
b. 31; work shown  
c. 32; work shown  
d. 38; work shown  
e. 39; work shown  
f. 32; work shown  
g. 33; work shown  
h. 35; work shown
- i. 37; work shown  
j. 39; work shown  
k. 35; work shown  
l. 36; work shown  
m. 39; work shown  
n. 40; work shown  
o. 35; work shown  
p. 37; work shown

## Lesson 29

### Problem Set

1. a. 25; work shown  
b. 35; work shown  
c. 29; work shown  
d. 39; work shown  
e. 40; work shown  
f. 33; work shown  
g. 32; work shown  
h. 35; work shown
2. a. 28; work shown  
b. 38; work shown  
c. 40; work shown  
d. 31; work shown  
e. 39; work shown  
f. 34; work shown  
g. 33; work shown  
h. 33; work shown

### Exit Ticket

- a. 32; work shown
- b. 37; work shown
- c. 40; work shown
- d. 40; work shown

### Homework

1. a. 28; work shown  
b. 38; work shown  
c. 39; work shown  
d. 33; work shown  
e. 31; work shown  
f. 39; work shown  
g. 33; work shown  
h. 34; work shown
2. a. 29; work shown  
b. 38; work shown  
c. 32; work shown  
d. 40; work shown  
e. 37; work shown  
f. 35; work shown  
g. 29; work shown  
h. 36; work shown