Mrs. Powers' Math Market

Mr. Swift, Manager

Where math earns cash…
(fake cash…but cash)

Come on down to the Math Market...

Teams purchase math problems and sell back the solutions at a profit!

As the difficulty increases...

So does the risk!

...but the profits increase as well!

How the Math Market operates...

- We will get into random groups of 2 or 3.
- Each team elects a captain.
- Each team will be given $5 to start.
- Each team earns money to buy more valuable problems.

How the Math Market operates...

- The captain can approach the sales counter and buy any level of problem they choose.
- The captain returns to their team to work through the problem on their board.
- The captain records the team's answer on their answer sheet.

How the Math Market operates...

- The captain then goes to the store manager.
- If the solution is correct, the captain can sell back the question for a profit and buy another question from the sales counter.
- If the answer is incorrect, the captain may repurchase the same question and make another attempt or purchase a new question.

How the Math Market operates...

- There is a limited number of questions at the math market.
- Each team may only purchase/ work on one problem at a time.
- Teams will be given a two minute warning before the market closes.
- The team with the most money at closing time wins!

Specifics...

Level of Question:	Cost:	Amount earned if correct:
	FREE	$5
	$5	$15
	$10	$25
	$20	$40

1

What is the word form for 407,219?

2

Which expression represents the number 13,809 written in expanded form?

(A) $13 + 80 + 9$

(B) $13,000 + 800 + 90$

(C) $9 + 1,300 + 80$

(D) $3,000 + 10,000 + 9 + 800$

3

Devin wrote a number in expanded form, as shown below.

$$500,000 + 90,000 + 3,000 + 20 + 8$$

Write Devin's number in standard form.

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Which number sentence correctly compares two numbers?

(A) forty-six thousand three hundred fifteen $< 46,350$

(B) $29,073 = 20,000 + 9,000 + 700 + 3$

(C) $10,000 + 6,000 + 400 >$ sixteen thousand four hundred ten

(D) $86,502 = 80,000 + 6,000 + 500 + 20$

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86,322 =

___ + 6,000 + ___ + 20 + 2

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What is the pace value of the underlined digit?
1<u>5</u>4,378

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What is 2,365 rounded to the nearest thousand?

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The area of a building is 709,285 square feet. What is this number rounded to the nearest thousand square feet?

(A) 700,000

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9 4 thousands + 3 tens + 5 hundred is less than which number below?

(A) 4 thousands + 5 tens + 3 hundreds

(B) 8 hundreds + 3 thousands + 8 ones

(C) 4 thousands + 7 ones + 8 tens + 6 hundreds

(D) 9 hundreds + 9 tens + 2 thousands

10 Which two numbers round to 1,500 when rounded to the nearest hu

(A) 1,399 and 1,599

(B) 1,499 and 1,549

(C) 1,457 and 1,547

(D) 1,489 and 1,589

11 Estimate the sum by rounding each number to the nearest hundred and then adding.

2,752 + 4,587 = ___

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$$9\frac{4}{10} - 2\frac{8}{10}$$

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14 Which list shows only fractions less than $\frac{1}{2}$?

(A) $\frac{1}{3}, \frac{1}{5}, \frac{1}{8}$

(B) $\frac{2}{3}, \frac{2}{4}, \frac{2}{5}$

(C) $\frac{1}{4}, \frac{5}{8}, \frac{6}{12}$

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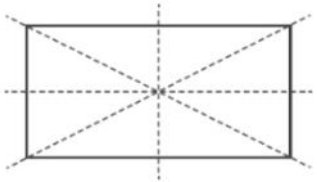

Figure A

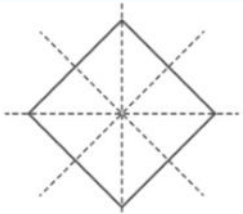

Figure B

Which figure shows only the correct lines of symmetry?

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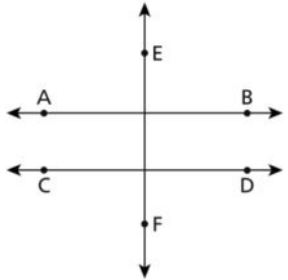

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Which figure is an example of a line segment?

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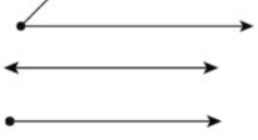
B



C

D

18

What is the quotient for the expression 2,314 ÷ 4?

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C 578

D $578\ r2$

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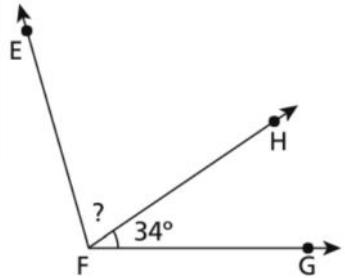
The measure of angle *EFG* is 106 degrees.



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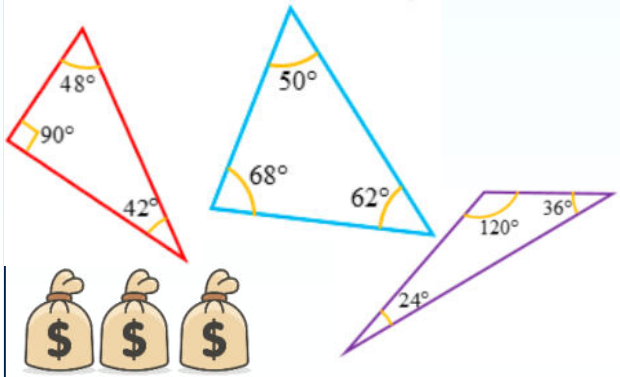
22 Find the unknown numbers that make the equation true.

$36 \times 94 = 2{,}700 + \_\_ + \_\_ + 24$

23 Identify the triangles by their angles.



24

Which comparison is true?

(A) $\frac{2}{3} = \frac{8}{12}$

(B) $\frac{4}{9} = \frac{8}{9}$

(C) $\frac{3}{4} > \frac{9}{10}$

(D) $\frac{2}{4} > \frac{2}{3}$

Level of Question:	Cost:	Amount earned if correct:
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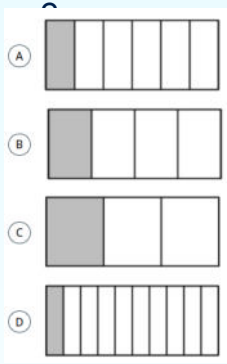
25 Cam has 35 ride tickets to use at the fair. If each ride costs 4 tickets, how many tickets will Cam have left over after going on as many rides as he can?

26 Which fraction model has a shaded area equivalent to $\frac{3}{12}$?



27 What is the measure, in degrees, of angle that is equivalent to $\frac{1}{360}$ of a circle?

(A) 1

(B) 90

(C) 180

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28 Sam has 12 baseball cards. Aly has 4 times as many baseball cards as Sam. Draw a tape diagram to show the comparison of Sam's cards to Aly's.

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-1 ticket earned for every 9 points earned.
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If the pattern continues, how many tickets are earned when 54 points are earned?

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-5 boxes of red folders with 36 in each box
-6 boxes of blue folders with 32 in each box

Which number is <u>closest</u> to the number of red and blue folders that the teacher buys?

(A) 275
(B) 380
(C) 440
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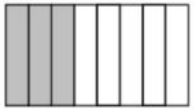
31 The shaded part of the model represents the fraction of a candy bar that Jill ate.



Tom has the same size candy bar. He eats 2 times the amount that Jill ate. what fraction of the candy bar does Tom eat?

32 Use each digit below to create a 5-digit number with the greatest value and a 5-digit number with the least value. Each digit can only be used once. Then write a number sentence using >, <, or = to compare the two numbers you created.

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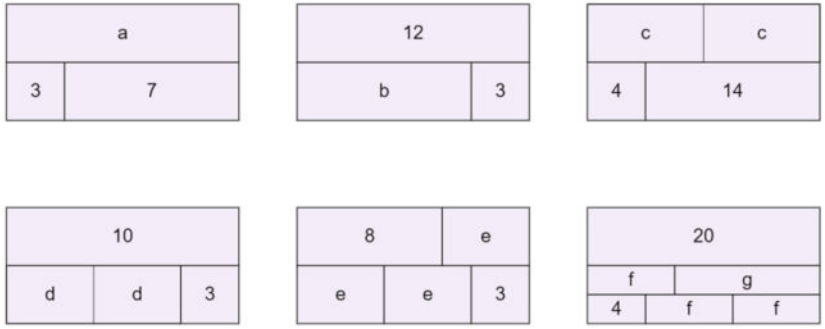
Find the value of each letter in the bar models.



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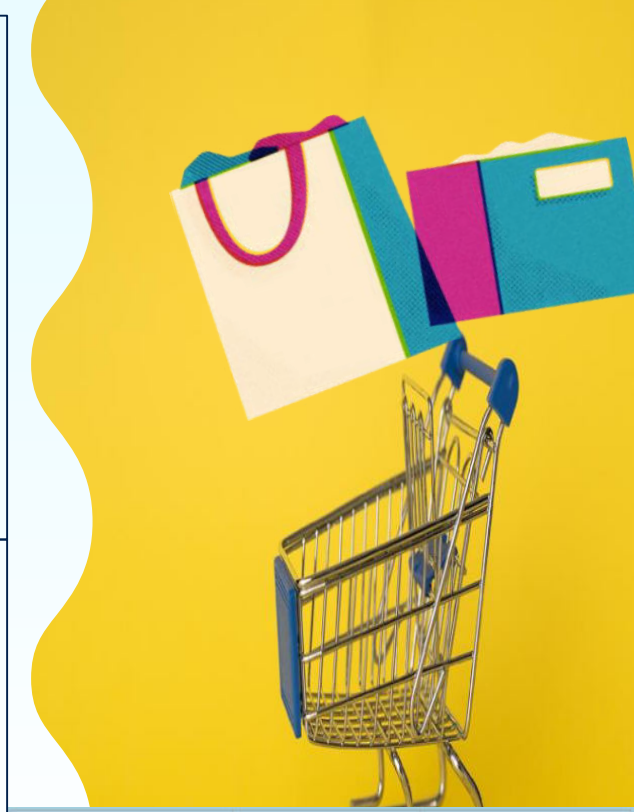
A student is using wooden blocks to build two towers of different heights. All of the blocks are the same size and have a height of $\frac{3}{4}$ inch. The short tower is 5 blocks high and the tall tower is 9 blocks high. What is the difference in height between the short tower and the tall tower? Show your work.



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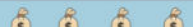	$20	$40

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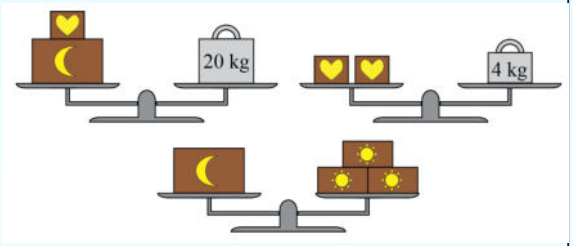

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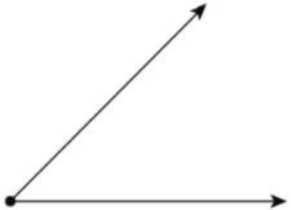

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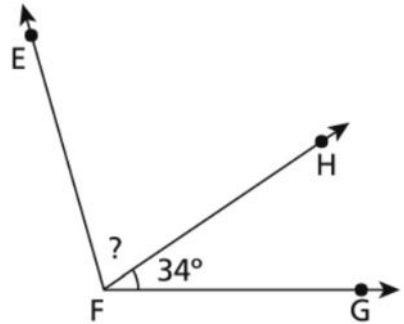

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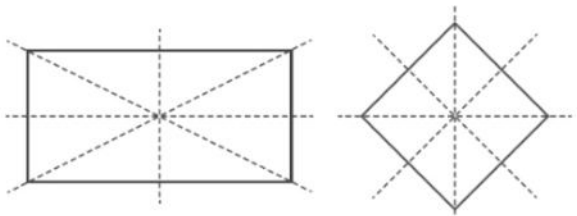

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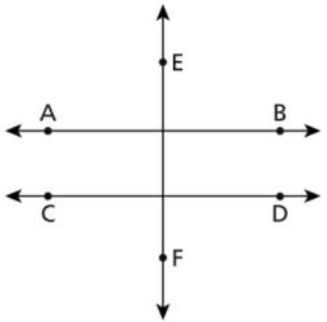

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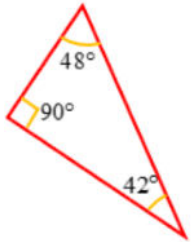

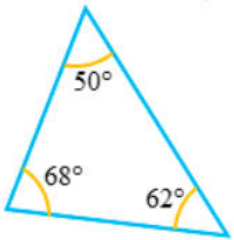

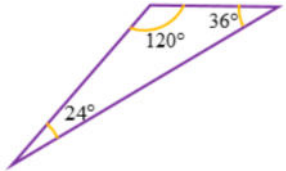

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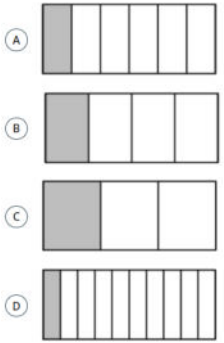

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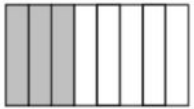

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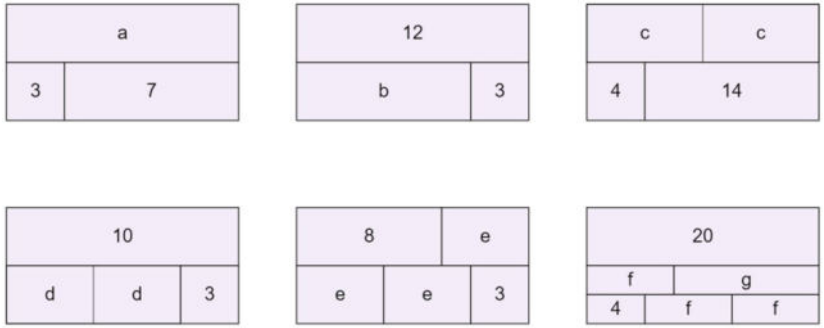

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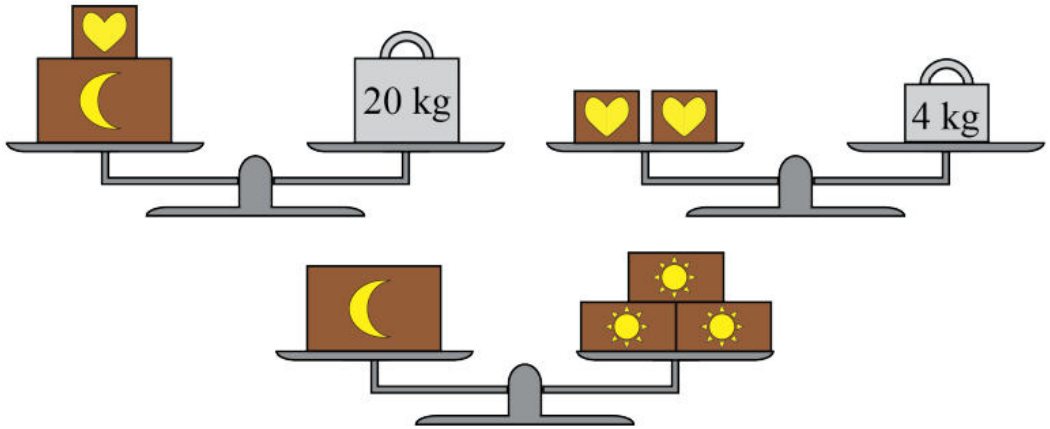

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17

18

Matt has 4 pens. Sue has 4 times as many pens as Matt. Chris has 2 times as many pens as Sue. Which equation can be used to determine the number of pens Chris has?

(A) $4 + 4 + 2 = \underline{\ ?\ }$

(B) $4 + 4 \times 2 = \underline{\ ?\ }$

(C) $4 \times 4 \times 2 = \underline{\ ?\ }$

(D) $4 \times 4 + 2 = \underline{\ ?\ }$

19

20

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