

NAME: _____

Translating between Words & Expressions

Translate the words into an algebraic expression.

- 1) 4 times x
- 2) The sum of x and 6
- 3) The product of 9 and y
- 4) w less than 8
- 5) 5 more than x
- 6) The difference of 6 and x
- 7) 9 times the product of x and 4
- 8) The product of 5 and y , divided by 3
- 9) The quotient of 300 and the quantity of x times 2
- 10) x less than 32
- 11) The quotient of 35 and the quantity of x minus 7
- 12) The product of 7 and x , minus the quantity of 4 less than y
- 13) The quantity of 9 more than x divided by the quantity of 12 less than y
- 14) Adult ticket prices are \$3 more than child ticket prices. Determine the adult ticket price, given the child ticket price.

Child Ticket Price	Adult Ticket Price
\$5	
\$7	
\$10	
\$12	

- 15) Write an expression that represents the adult price, if the child price is " x "
- 16) For NJASK testing, 25 students are placed in each classroom. Determine the number of classrooms needed, given the number of students testing.

Number of Students Testing	Number of Classroom Needed
250	
325	
400	
520	

- 17) Write an expression that represents the number of classrooms needed, if the number of students testing is “x”
- 18) Mary has $\frac{1}{2}$ the amount of money that Jim has. Determine the amount of money that Mary has, given Jim’s amount of money.

Jim’s Amount of Money	Mary’s Amount of Money
\$50	
\$100	
\$175	
\$220	

- 19) Write an expression that represents the amount of money Mary has, given the amount of Jim’s money.

Write an expression for each of the following situations.

- 20) Bob weighs 7 more pounds than Jack. Jack weighs x pounds. Bob’s weight:
- 21) Tiffany has 6 dollars less than Jessica. Jessica has x dollars. Tiffany’s money:
- 22) Samantha has 12 more stickers than Mike. Mike has x stickers. Samantha’s sticker amount:
- 23) The recipe calls for twice the amount of sugar than flour. There is f amount of flour in the recipe. Amount of sugar:
- 24) Mark’s quiz grade is one more than twice Ted’s quiz grade. Ted’s quiz grade is x. Mark’s quiz grade:
- 25) Laura paid x dollars for her prom dress. Beth paid four dollars less than Laura. Beth’s prom gown price:
- 26) David ran the 5k in x minutes. Harry ran the same race in five minutes less than double David’s time. Harry’s time:
- 27) The beans grew k inches. The tomatoes grew 3 inches more than triple the height of the beans. Tomato height:

Create a scenario for the following expressions:

28) $x + 5$

29) $2(x - 3)$

- 30) Child ticket prices are \$3 less than adult ticket prices. Determine the child ticket price, given the adult ticket price.

Adult Ticket Price	Child Ticket Price
\$10	
\$15	
\$20	
\$25	

- 31) Write an expression that represents the child price, if the adult price is “x”
- 32) For busing, 40 students are assigned to each bus. Determine the number of buses needed, given the number of students riding.

Number of Students Riding	Number of Buses Needed
240	
320	
400	
500	

- 33) Write an expression that represents the number of buses needed, if the number of students riding is “x”

Write an expression for each of the following situations.

- 34) Bob weighs 17 pounds less than Jack. Jack weighs x pounds. Bob’s weight:
- 35) Tiffany has 50 dollars more than Jessica. Jessica has x dollars. Tiffany’s money:
- 36) Samantha has 12 times as many stickers than Mike. Mike has x stickers. Samantha’s sticker amount:

- 37) The recipe calls for triple the amount of sugar than flour. There is f amount of flour in the recipe. Amount of sugar:

Create a scenario for the following expressions:

38) $2(x + 3)$

39) $x - 4$

Thursday Homework

Translate the words into an algebraic expression.

40) The product of 14 and x

41) The quotient of x and 5

42) The sum of 19 and w

43) w less than 8

44) 7 less than x

45) The difference of 16 and y

46) 9 times the quotient of x and 20

47) The product of 6 and x , less 3

48) The quotient of 100 and the sum of x and 2

49) x less than 2

50) The product of 5 and the quantity of x less than 7

51) The product of 27 and y , divided by the quantity of 4 more than y

52) The quantity of 6 less than x divided by the quantity of 2 more than y

53) David ran the 5k in x minutes. Harry ran the same race in half the time that David ran the race. Harry's time:

54) The beans grew k inches. The tomatoes grew triple the height of the beans, less 2 inches. Tomato height:

Resource: New Jersey Center for Teaching and Learning