**TCAP Blitz Assessment – 6th Grade**

**Weeks 3 – 4**

1. Which question can the equation *n* = 12  12  15 answer?

A What is the area of a triangle that has a base of 12 centimeters and height of 15 centimeters?

B What is the volume of a rectangular prism that has a length of 12 centimeters, a width of 12 centimeters, and a height of 15 centimeters?

C What is the perimeter of a triangle that has sides of 12 centimeters, 12 centimeters, and 15 centimeters?

D What is the surface area of a triangular prism that has

 a height of 12 centimeters, a length of 12

 centimeters, and a width of 15 centimeters.

1. Ethan is 63 inches tall. This is 7 inches less than twice the height of his younger sister Isabella. Which equation can be used to determine *h*, the height of Isabella?

A 7*h* – 2 = 63

B 2*h* – 7 = 63

C 2*h* – 7 = 63

D 7*h* + 2 = 63

1. Which equation does the drawing below represent?



A 3*x* = 10

B 3*x* + 4 = 7*x*

C 3*x* + 4 = 10

D 4*x* + 3 = 10

1. Raul goes to a music store to buy the items listed on the table below.



He pays for the items with a $100 bill. Which equation can be used to find *m* the amount of change Raul should receive?

A *m* = 100 – 14.95  0.50  10.95

B *m* = 100 – 2  (14.95 + 0.50)  10.95

C *m* = 100 – (2  14.95) – (3  0.50) – 10.95

D *m* = (2  14.95) + (3  0.50) + 10.95

1. Which expression is equivalent to the expression below?

9(4 + *y*)

A 36 + 4*y*

B 13  9*y*

C 36 + 9*y*

D 54 + 6*y*

1. A math test problem is shown below.

4(*a* + 5) + 2(*a* – 4)

What is the simplified form of this expression?

A 6*a* + 1

B 6*a* + 5

C 6*a* + 12

D 6*a* + 16

1. Which expression is equivalent to the expression below?

5(*a* + 9)

A 14*a*

B 50*a*

C 5*a* + 9

D 5*a* + 45

1. Which expression below is equivalent to

 4*x* + 3(*x* + 5)?

A 4*x* + 8

B 5*x* + 15

C 7*x* + 5

D 7*x* + 15

1. Which of the following has same meaning as the expression below?

8*n* – 2

A 2 less than the product of 8 and a number *n*

B the sum of 2 and the product of 8 and a number *n*

C the quotient of 8 and a number *n* less 2

D the difference in 2 and the quotient of 8 and a

number *n*

1. What is the algebraic expression for “27 fewer than the product of 32 and *t*?”

A 

B 

C 

D 

1. The product of 15 and some number *x* is 45. Which equation shows this relationship?

A *x* + 15 = 45

B 45*x* = 15

C 15*x* = 45

D *x* – 15 = 45

1. When 15 is added to the number of students in a math class, the result is 32. Which equation can be used to find *h*, the number of students in the math class?

A 15 + *h* = 32

B 15 + 32 = *h*

C *h* – 32 = 15

D 15*h* = 32

1. Jin used the equation below to find the number of photos in an album.



How many photos are in Jin’s album?

A 6

B 96

C 128

D 160

1. The equation below can be used to find *p*, the number of 2-minute penalties a hockey player has if he plays 36 minutes out of a game that lasts 50 minutes.

36 + 2*p* = 50

Which value of *p* makes the equation true?

A 2

B 4

C 6

D 7

1. The solution to the equation below gives the number of lakes managed by Tennessee Wildlife Resources Agency.

3*x* – 9 = 45

How many lakes are managed by the Tennessee Wildlife Resources?

A 8

B 12

C 15

D 18

1. Heather spends a total of $600 on food to cater two events. She hopes to make a total profit of $240.



She uses the equation below to find *p*, the price in dollars that she needs to charge per serving.

140*p* – 600 = 240

How much should Heather charge per serving, in dollars?

A $5

B $6

C $7

D $8

1. Kumar wants to find the location of an ordered pair. Which point best represents the location of the ordered pair (–1, –4)?



A Point *K*

B Point *L*

C Point *P*

D Point *M*

1. What are the coordinates of Point *N* on the graph below?



A (6, 3)

B (6, –3)

C (3, –6)

D (–6, –3)

1. Which point is located at (3, 2) on the graph below?



A Point *P*

B Point *Q*

C Point *R*

D Point *S*

1. Which ordered pair names the location of Point *T* on the graph below?



A (–3, 1)

B (–1, 3)

C (1, 3)

D (3, 1)