Please complete the following review questions.
Open a new word document and type in your answers.
If you have trouble with any of the questions, please put that in your document and I can provide some help.
Name your file m20_2_rev3_username (replace username with your username).
Post to the correct Assignment Dropbox.

1. If Tammy wants a pager, she must pay 75¢/min for each page plus a monthly fee of $25.00. Which formula would give the pager cost for one month if c is cost in dollars and x is the number of minutes that she spends on the phone?

A. c = 75(x + 0.25)
B. c = 25x + 0.75
C. c = 0.75(x + 25)
D. c = 0.75x + 25

2. Which of the following is equivalent to 3x = 4 − 2x?

A. x = 4
B. 6x = 4
C. 5x = 4
D. 0 = 4 + x

3. Gabriel hires a painter to paint the walls of her room. The painter tells him that it will cost $121.00. If he uses the formula c = 3x + 25, where c = cost in dollars and x = area in square metres to be painted, what is the area of walls to be painted?
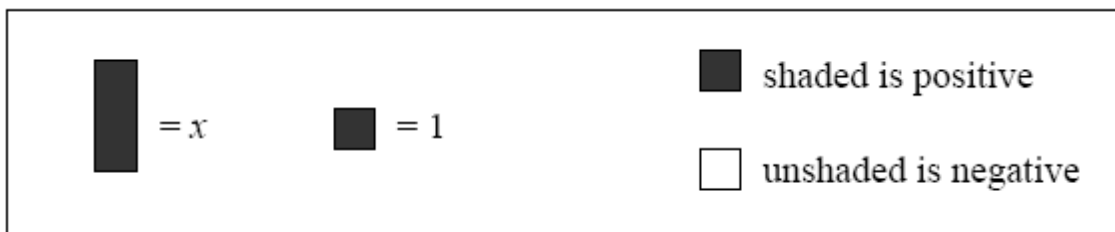
A. 15.3 m^3
B. 32.0 m^3
C. 48.7 m^3
D. 380.0 m^3

4. To win tickets to an Oilers game, Matt entered a contest by answering a skill-testing question. His answer of −3 is a solution for the equation

A. $\dfrac{7x}{9} = \dfrac{-7}{3}$
B. 7 − 2x = 1
C. 2(x − 2) = 2 − 3(x − 3)
D. −3x + 2 = -7

5. The terms in the expression $7x + 2y - 15$ are

A. 7, 2, -15
B. 7x, 2y
C. 7x, 2y, -15
D. x, y, -15

Use the following diagram to answer question 6.

$= x$ $= 1$ shaded is positive

unshaded is negative

6. Which expression describes the diagram below?

A. 3x + 8
B. 2x + 5
C. x + 3
D. x + 2

Use the following information to answer question 7.

 John found the solution to four problems. He wished to verify his solutions.

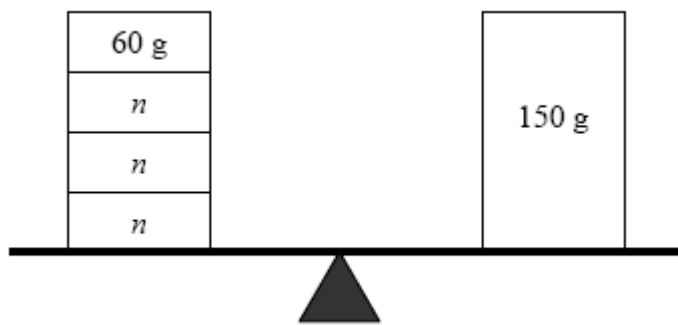7. Which equation has the correct solution given?

A. $\dfrac{b}{-3} + 4 = 7, b = 9$

B. $\dfrac{c+4}{2} = 3, c = -2$

C. -2(d+1.5)=3, d = -3

D. 1.8e − 2.4 = 3, e = -3

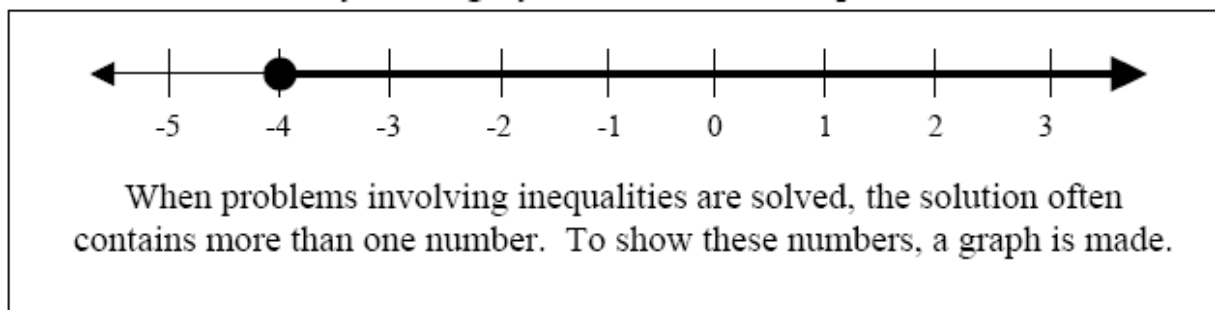8. Which equation represents the information on the balance scale?

A. $n^3 + 60 = 150$
B. $60n^3 = 150$
C. 3n + 60 = 150
D. 3n − 60 = 150

Use the following information to answer question 9.

When problems involving inequalities are solved, the solution often contains more than one number. To show these numbers, a graph is made.

9. The above is a graph of

A. $-4 < x < 3$, where x is an integer
B. $x > -5$, where x is an integer
C. $x \leq -4$, where x is a rational number
D. $x \geq -4$, where x is a rational number

10. Kayla obtained a solution of –4 after correctly solving an equation. Which equation did she solve?

A. $2(1 - x) = 16 - (2 - x)$
B. $-4x + 8 = -8$
C. $\dfrac{5x}{8} = \dfrac{5}{2}$
D. $21 - 4x = 5$

11. Solve for n in the statement $10n - 50 = 5c + 250$, where n is the number of items bought and c is the price per item

A. $n = \dfrac{1}{2}c + 30$
B. $n = 5c + 255$
C. $n = -60$
D. $n = -0.1c + 10$

12. Nadia bowled five games and had an overall average of 205. Her scores on the first four games were 205, 203, 187, and 216. What was her score on the fifth game?

A. 214
B. 203
C. 202
D. 162

Use the following information to answer question 13.

When a load (L) is hung on a spring, the spring stretches. The amount the spring stretches is called the extension (E).					
L (kg)	0	1.2	2.0	3.2	4.8
E (cm)	0	0.9	1.5	2.4	3.6

13. Which formula below shows the relationship between extension and load?

A. $E = \dfrac{4}{3}L$

B. $E = L - 1.2$

C. $E = L - 0.3$

D. $E = \dfrac{3}{4}L$

14. Evaluate $(c - b)^2 + (b - c)^2$, where $b = -2$ and $c = 1$.

A. 81
B. 18
C. 2
D. 0

15. Natalka modelled the process of factoring $x^2 + 4x + 4$ by using algebra tiles and forming a square with them.

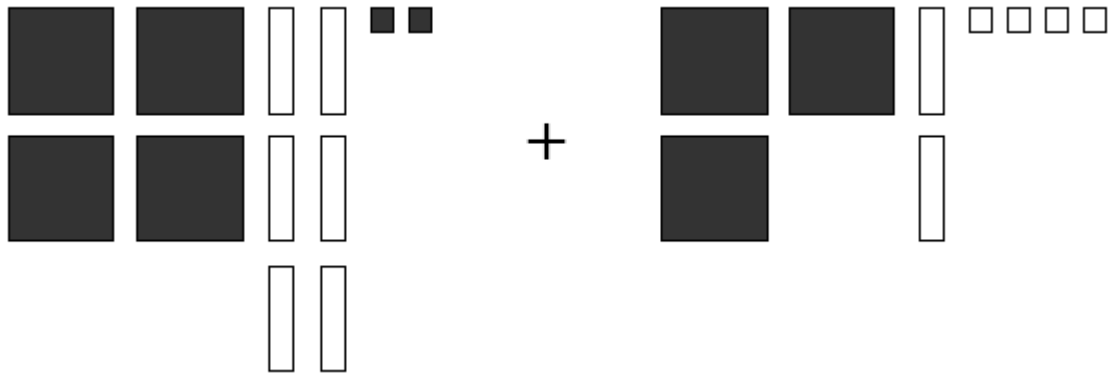What are the factors of $x^2 + 4x + 4$?

A. $(x - 2)(x - 2)$
B. $(x + 2)(x + 2)$
C. $(x - 4)(x - 4)$
D. $(x + 4)(x + 4)$

16. Choose the algebraic expression represented by the following arrangement of algebra tiles:

A. $7x^2 - 8x + 2$
B. $7x^2 + 8x + 6$
C. $7x^2 - 4x + 2$
D. $7x^2 - 8x - 2$

17. Evaluate $3x^3 + \dfrac{1}{2}x^4 - 2x + 2$ when x = 2

A. -10
B. 14
C. 30
D. 106

18. $4x^2 + 4x - 10 + 4x - 2x^2$, when completely factored.

A. $2(x - 1)(x + 5)$
B. $2(x + 1)(x - 5)$
C. $2(2x^2 + 4x - 5)$
D. $2(x - 1)(x + 4)$

19. $(6x^2 + 4x - 7) - (2x^2 - 4x - 3)$

A. $8x^2 + 8x - 10$
B. $4x^2 + 8x - 4$
C. $4x^2 - 8x - 10$
D. $4x^2 - 10$

20. Find the product $(8g^2 + 11g - 3)(6h^3t^5)$.

A. $8g^2 + 11g - 18h^3t^5$
B. $48g^2h^3t^5 + 66gh^3t^5 - 18h^3t^5$
C. $96g^2h^3t^5g$
D. $114g^2h^3t^5 - 18h^3t^5$