Class Name : Pre-Alg Fundamental/Intro Math - Fall Instructor Name : Ms. Revelle 2017

Student Name : $\qquad$ Instructor Note :

1. Find the slope of the line graphed below.

2. Rewrite $9 \times 9 \times 9$ using an exponent.
3. Write an ordered pair for the location of the Post Office.


$$
(x, y)=(\square, \square)
$$

4. Solve for $v$.

$$
-9=v-2
$$

5. Solve for $y$.

$$
-21=-7 y
$$

Simplify your answer as much as possible.
6. A ladder leans against the side of a house. The top of the ladder is 11 ft from the ground. The bottom of the ladder is 8 ft from the side of the house. Find the length of the ladder. If necessary, round your answer to the nearest tenth.

7. Solve for $w$.

$$
6(w-4)=18
$$

Simplify your answer as much as possible.
8. Find the slope of the line graphed below.

9. Solve for $u$.

$$
2 \times u=4
$$

10. Add.

$$
\begin{array}{r}
-4+(-5)= \\
4+(-5)=
\end{array}
$$

11. Fill in the table using this function rule.

$$
y=23-4 x
$$

| $x$ | $y$ |
| :---: | :---: |
| 2 | $\square$ |
| 3 | $\square$ |
| 4 | $\square$ |
| 5 | $\square$ |

12. A tiger weighs 691 pounds.

Another tiger weighs 78 pounds. How much do they weigh total?
13. Evaluate.

$$
\begin{aligned}
& (-3)^{3}=\rrbracket \\
& (-4)^{2}=\rrbracket
\end{aligned}
$$

14. Find the slope of the line graphed below.

15. Fill in the table using this function rule.

$$
y=-4 x-2
$$

| $x$ | $y$ |
| :---: | :---: |
| -2 |  |
| 0 |  |
| 2 |  |
| 4 |  |

16. Evaluate $8+9 \times 4$.
17. Evaluate.
$2^{5}$
18. Solve for $x$.

$$
-4 x+13 x+5=6 x+32
$$

Simplify your answer as much as possible.
19. Solve for $v$.

$$
42-4 v=2 v
$$

Simplify your answer as much as possible.
20. Graph the line with $y$-intercept 2 and slope $-\frac{2}{3}$.

21. Solve for $x$.

$$
9=-5+x
$$

22. On the number line below, plot -7 and the opposite of -7 .

23. Using the pencil, plot the point $(4,0)$.

24. Subtract.

$$
\frac{6}{7}-\frac{2}{5}
$$

Write your answer as a fraction in simplest form.
25. Solve for $y$.

$$
y-7.3=9.7
$$

26. Find the missing side length.

Assume that all intersecting sides meet at right angles.
Be sure to include the correct unit in your answer.

27. Find the missing side length.

Assume that all intersecting sides meet at right angles.
Be sure to include the correct unit in your answer.

28. Write $\frac{9}{15}$ in simplest form.
29. Graph the line with $y$-intercept 1 and slope 3 .

30. Write $\frac{6}{8}$ in simplest form.
31. Solve for $u$.

$$
3 u+2 u=10
$$

Simplify your answer as much as possible.
32. Graph the line with $y$-intercept 9 and slope $-\frac{4}{3}$.

33. Evaluate.
$10^{7}$
34. Using the pencil, plot the point $(1,0)$.

35. For each value of $v$, determine whether it is a solution to $20=5 v$.

| $v$ | Is it a solution? |  |
| :---: | :---: | :---: |
|  | Yes | No |
| 15 | 0 | 0 |
| 6 | 0 | 0 |
| 7 | 0 | 0 |
| 3 | 0 | 0 |

36. The graph below shows the numbers of wins by a basketball team over six years.

(a) What was the least number of wins in a year?
(b) When did the greatest decrease in wins occur?
37. Solve for $x$.
$7.68=6 x$
38. Find the perimeter of the square. Be sure to write the correct unit in your answer.


17 in
39. Graph the line.

$$
y=3 x-8
$$


40. Graph the line with slope 6 and $y$-intercept -9 .

41. Solve for $w$.
$9+w=-3$
42. Justin buys cheese from the local farmer's market. The graph below shows the cheese cost (in cents) versus its weight (in ounces).

Use the graph to answer the questions.

(a) How much does the cost of the cheese increase for each ounce Justin buys?
$\qquad$ cents
(b) What is the slope of the line?
$\qquad$
43. Give the digits in the hundreds place and the ones place.

1,809
hundreds:
ones:
44. Fill in the table using this function rule.

$$
y=-3 x+3
$$

| $x$ | $y$ |
| :---: | :---: |
| -4 |  |
| -2 |  |
| 0 |  |
| 2 |  |

45. A bucket is being filled with water. The graph below shows the water height (in mm ) versus the time the water has been running (in seconds).

Use the graph to answer the questions.

Height (mm)

(a) What is the slope of the line?
$\qquad$
(b) How much does the height of the water increase for each second the water is running?
$\qquad$ mm
46. Evaluate $5+(-5) \times 8$.
47. Solve for $v$.

$$
-56=-\frac{v}{3}
$$

Simplify your answer as much as possible.
48. Solve for $x$.

$$
45=\frac{x}{3}
$$

Simplify your answer as much as possible.
49. Evaluate.

$$
-3(-5)(-1)(2)
$$

50. Fill in each blank with a whole number.


# Intro Math 1 Final Exam \#2 Answers for class Pre-Alg Fundamental/Intro Math - Fall 2017 

1. $-\frac{6}{5}$
2. $9 \times 9 \times 9=9^{3}$
3. $(x, y)=(2,3)$
4. $v=-7$
5. $y=3$
6. 13.6 ft
7. $w=7$
8. -2
9. $u=2$
10. 

$$
\begin{array}{r}
-4+(-5)=-9 \\
4+(-5)=-1
\end{array}
$$

11. 

| $x$ | $y$ |
| :---: | :---: |
| 2 | 15 |
| 3 | 11 |
| 4 | 7 |
| 5 | 3 |

12. 769 pounds
13. 

$(-3)^{3}=-27$
$(-4)^{2}=16$
14.7
15.

| $x$ | $y$ |
| :---: | :---: |
| -2 | 6 |
| 0 | -2 |
| 2 | -10 |
| 4 | -18 |

16. 44
17. 32
18. $x=9$
19. $v=7$
20. 


21. $x=14$
22.

23.

24. $\frac{16}{35}$
25. $y=17$
26. 6 cm

## 27.6 cm

28. $\frac{3}{5}$
29. 


30. $\frac{3}{4}$
31. $u=2$
32.

33. $10,000,000$
34.

35.

| $v$ | Is it a solution? |  |
| :---: | :---: | :---: |
|  | Yes | No |
| 15 | 0 | $\odot$ |
| 6 | 0 | $\odot$ |
| 7 | 0 | $\odot$ |
| 3 | 0 | $\odot$ |

36. 

(a) What was the least number of wins in a year?

18 wins
(b) When did the greatest decrease in wins occur? 2015 to 2016
37. $x=1.28$
38. 68 in
39.

40.

41. $w=-12$
42.
(a) How much does the cost of the cheese increase for each ounce Justin buys?

66 cents
(b) What is the slope of the line?

66
43.
hundreds: 8
ones: $\quad 9$
44.

| $x$ | $y$ |
| :---: | :---: |
| -4 | 15 |
| -2 | 9 |
| 0 | 3 |
| 2 | -3 |

45. 

(a) What is the slope of the line?

## 5

(b) How much does the height of the water increase for each second the water is running? 5 mm
46. -35
47. $v=168$
48. $x=135$
49. -30
50.

$$
\frac{5}{5}=1
$$

$$
\frac{8}{1}=8
$$

