

**Summer
Review****Entering Pre-Algebra-8****Order the numbers from least to greatest.**

1. $-|-1|, 0, |-2|, -5, -4$

2. $\frac{17}{2}, -6.7, -\frac{28}{5}, 8.2$

Answers

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

13. _____

14. _____

15. _____

16. _____

17. _____

18. _____

19. _____

See left.

20. _____

See left.

Simplify the expression.

3. $2 - (-5)$

4. $-6 + 11$

5. $-2.5(6)$

6. $45 \div (-3)$

7. $-\frac{2}{5} + \frac{7}{10}$

8. $0.38 - 1.4$

9. $2\frac{1}{8} \cdot \left(-\frac{6}{5}\right)$

10. $-12.88 \div 2.8$

11. On an exam you get two points for each question answered correctly, zero points for each question left blank, and lose one-half point for each question answered incorrectly. What is your total score on the exam if you answer 13 questions correctly, leave 7 questions blank, and answer 5 questions incorrectly?

Solve.

12. $x + 3\frac{2}{5} = 2\frac{1}{6}$

13. $-0.25a + 3.8 = 4.6$

14. A pencil costs \$0.27 and a pen costs \$0.32. You buy six pencils and the total cost is \$4.18. How many pens did you buy?

15. A farmer builds a fence to enclose a rectangular pasture. He uses 155 feet of fence. Find the total area of the pasture if it is 45.5 feet long.

Write the word sentence as an inequality.

16. 3.2 less than a number t is at most 7.5.

17. A number m multiplied by $\frac{4}{7}$ is greater than $\frac{12}{5}$.

18. You and three friends are making a gift basket. You want to keep the cost below \$12 per person. Write and solve an inequality that represents the total cost of the gift basket.

Solve the inequality. Graph the solution.

19. $k + 10 \leq 6$

20. $-5v > -10$



Summer Review

Entering Pre-Algebra-8 (continued)

21. If you spend at least \$50 (including shipping) at an online store, you receive a \$10 gift card. You want to buy CDs that cost \$12.50 each. If shipping costs \$5, write and solve an inequality to find the number of CDs you must buy to receive the gift card.

22. The table shows the time in minutes m to download s songs. How long does it take to download one song?

Minutes	0.5	1.5	2.5
Songs	2	6	10

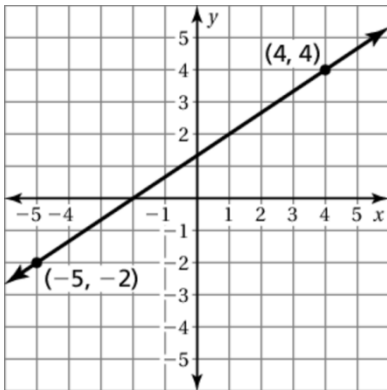
Tell whether the ratios form a proportion.

23. $\frac{4}{7}, \frac{12}{28}$

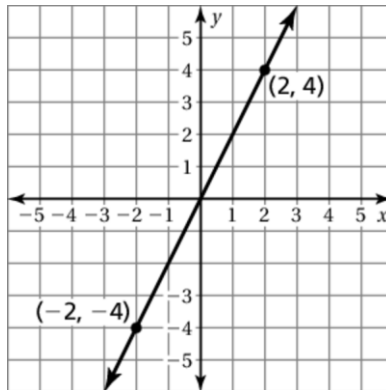
24. $\frac{6}{11}, \frac{30}{55}$

25. Solve the proportion $\frac{3}{8} = \frac{11}{x}$.

Find the slope of the line.



27.



Answers

- 21. _____
- _____
- 22. _____
- 23. _____
- 24. _____
- 25. _____
- 26. _____
- 27. _____
- 28. _____
- 29. _____
- _____
- _____
- _____
- 30. _____
- 31. _____
- 32. _____

28. If 27% of a number is 11.34, what is the number?

29. A store sign reads, “Take 90% off the original price when you take an additional 15% off the sale price, which is 75% off the original price.” Is the store’s sign accurate? Explain.

30. You put \$1205 in an account that earns 2.5% simple interest. Find the total amount in the account after four years.

Classify the angles as *complementary*, *supplementary*, or *neither*.

31. $18.5^\circ, 71.5^\circ$

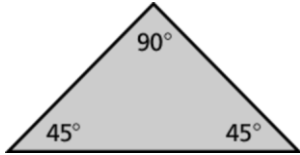
32. $134.2^\circ, 55.8^\circ$

**Test
2**

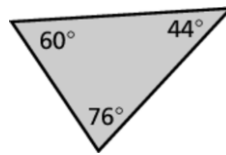
Entering Pre-Algebra-8 (continued)

Classify the triangle.

33.



34.

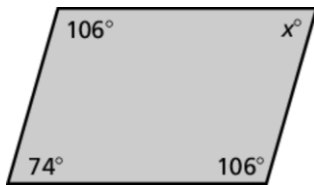


Answers

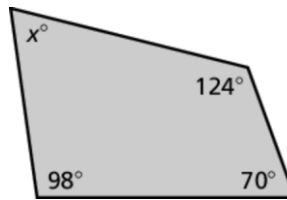
33. _____

34. _____

Find the value of x .



36.



35. _____

36. _____

37. _____

38. _____

37. A scale drawing has a scale of 5 mm : 1 cm. What is the scale factor?

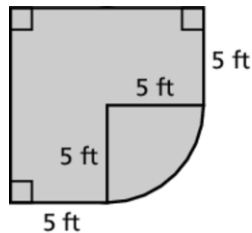
38. The diameter of a circle is 28 inches. Find the circumference and area. Use $\frac{22}{7}$ for π .

39. _____

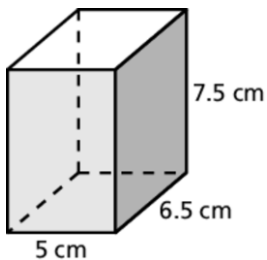
40. _____

39. Find the area of the figure. Use 3.14 for π .

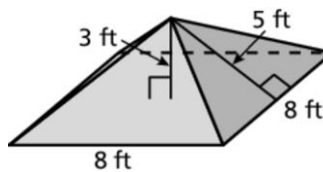
41. _____



Find the volume and surface area of the solid.



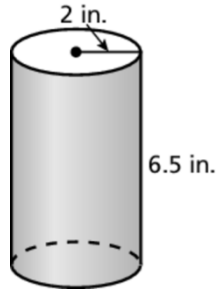
41.



Summer Review

Entering Pre-Algebra-8 (continued)

42. Find the surface area of the cylinder.
Round your answer to the nearest tenth.



Answers

42. _____

43. a. See left.

b. See left.

44. _____

45. _____

46. _____

47. _____

48. _____

43. A manufacturer wants to make a box with a volume of 72 cubic feet.
a. Sketch two possible designs for the box.

- b. If the box is to be made out of wood that costs \$4 per square foot, which of your designs would be less expensive to produce? Explain.

44. The theoretical probability that you will participate in Track and Field is $\frac{2}{7}$. There are about 344 students in your grade. About how many students in your grade will participate in Track and Field?

45. You have 10 cards numbered from 1 to 10. You choose a card at random. Then without replacing the first card, you choose another card at random. What is the probability that you choose two even numbers?

You roll a number cube twice. Find the probability of the event.

46. Rolling a 1 then a 2
47. Rolling an odd then an even
48. The probability that your ticket will be chosen in a drawing is 16%. There are 125 tickets in the drawing. How many tickets are yours?