

Pre-Course

Pre-Course Test

Multiply or divide.

1. $4.5 \div 0.9$

2. $34.1 \div 5.5$

3. $2.7(7.8)$

4. $\frac{6}{7} \cdot \frac{5}{9}$

5. $\frac{4}{5} \div \frac{8}{11}$

6. $\frac{3}{8} \cdot \frac{4}{9}$

7. You need to buy 5 notebooks for your classes at school. Each notebook costs \$2.79. What is the total cost of 5 notebooks before tax?

Complete the statement using $<$, $>$, or $=$.

8. $\frac{4 \text{ tables}}{3 \text{ groups}} \text{ — } \frac{6 \text{ tables}}{5 \text{ groups}}$

9. $\frac{66 \text{ pages}}{2 \text{ hours}} \text{ — } \frac{99 \text{ pages}}{3 \text{ hours}}$

10. You have \$50 in your savings account. Each week you deposit \$5 in your account. Write an expression that models the situation.

Solve the equation.

11. $x + 5 = 10$

12. $x - 2 = 6$

13. $x - 1 = 9$

14. $7 + x = 13$

15. $5x = 65$

16. $\frac{x}{3} = 11$

17. What is the surface area of a rectangular prism with length 5 centimeters, width 2 centimeters, and height 3 centimeters?

Tell whether the two expressions are equivalent.

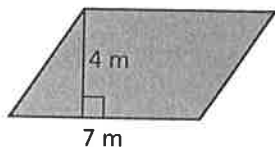
18. $5 + 3b$; $3b + 5$

19. $5(h + 7)$; $5h + 35$

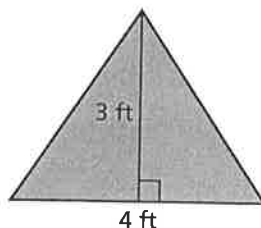
20. $(2 - c)4$; $2 - 4c$

Find the area of the figure.

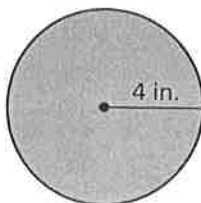
21.



22.



23. What is the circumference of the circle? Use 3.14 for π .



Answers

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. See left.

9. See left.

10. _____

11. _____

12. _____

13. _____

14. _____

15. _____

16. _____

17. _____

18. _____

19. _____

20. _____

21. _____

22. _____

23. _____

Pre-Course**Pre-Course Test (continued)****Write the decimal as a percent.**

24. 0.89

25. 2.37

26. 0.0029

Write the percent as a decimal.

27. 3%

28. 78%

29. 500%

30. In a survey, $\frac{17}{25}$ of the people surveyed have a cat. What percent of the people surveyed have a cat?

Order the numbers from least to greatest.

31. $\frac{5}{8}$, 60%, 0.64

32. 34%, $\frac{4}{15}$, 0.3

33. 0.57, 5.8%, $\frac{14}{25}$

Estimate the sum or product.

34. $1.52(98)$

35. $2.04(3.97)$

36. $4.42 + 5.91$

Find the mean, median, mode(s), and range of the data set.

37. 5, 9, 12, 3, 4, 5, 7, 14, 13

38. 1, 7, 2, 3, 9, 4, 6, 10

39. The following data are the numbers of customers at a coffee shop over a 10-day period.

135, 124, 140, 122, 409, 132, 119, 128, 136, 125

Which measure of center best represents the daily average number of customers at the coffee shop? Explain your reasoning.

Multiply or divide.

40. 56×18

41. $656 \div 41$

42. $184 \div 23$

Write the fraction as a decimal.

43. $\frac{13}{20}$

44. $\frac{3}{8}$

45. $\frac{21}{40}$

Answers

24. _____

25. _____

26. _____

27. _____

28. _____

29. _____

30. _____

31. _____

32. _____

33. _____

34. _____

35. _____

36. _____

37. _____

38. _____

39. _____

40. _____

41. _____

42. _____

43. _____

44. _____

45. _____