

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.

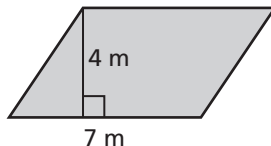
18. $5 + 3b$; $3b + 5$

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

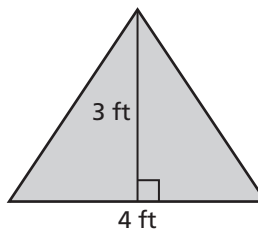
20. $(2 - c)4$; $2 - 4c$

Find the area of the figure.

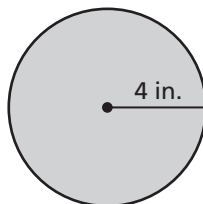
21.



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. _____

Pre-Course Test Item Analysis

Item Number	Skills
1	dividing decimals
2	dividing decimals
3	multiplying decimals
4	multiplying fractions
5	dividing fractions
6	multiplying fractions
7	multiplying decimals
8	comparing rates
9	comparing rates
10	writing expressions to represent situations
11	solving one-step equations
12	solving one-step equations
13	solving one-step equations
14	solving one-step equations
15	solving one-step equations
16	solving one-step equations
17	finding the surface area of a rectangular prism
18	applying the comm. property
19	applying the distributive property
20	applying the distributive property
21	finding the area of a parallelogram
22	finding the area of a triangle
23	finding the circumference of a circle

Item Number	Skills
24	converting decimals to percents
25	converting decimals to percents
26	converting decimals to percents
27	converting percents to decimals
28	converting percents to decimals
29	converting percents to decimals
30	converting fractions to percents
31	ordering rational numbers
32	ordering rational numbers
33	ordering rational numbers
34	estimating product of decimals
35	estimating product of decimals
36	estimating sum of decimals
37	finding measures of center and range
38	finding measures of center and range
39	determining measures of center
40	multiplying whole numbers
41	dividing whole numbers
42	dividing whole numbers
43	converting fractions to decimals
44	converting fractions to decimals
45	converting fractions to decimals

