

Name _____ Date _____

Summer Math Packet – Entering 8th Grade

Simplify the expressions

1. $4.5 \div 0.9$

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

3. $34.1 \div 5.5$

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

5. $2.7(7.8)$

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

7. $1.52(98)$

8. $2.04(3.97)$

9. $4.42 + 5.91$

10. $56(18)$

11. $656 \div 41$

12. $184 \div 23$

Simplify the expressions

13. $4 - (-3)$

14. $-2 + 15$

15. $-3(4)$

16. $27 \div (-3)$

17. $-\frac{1}{6} + \frac{7}{12}$

18. $0.24 - 1.6$

19. $2\frac{3}{5} \cdot \left(-\frac{4}{3}\right)$

20. $-24 \div 3.2$

21. 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?

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

Solve the equations.

23. $x + 5 = -10$

24. $-7 + x = 13$

25. $x - 2 = -6$

26. $-5x = 65$

27. $x + 1 = -9$

28. $-\frac{x}{3} = -11$

29. $x + 2\frac{4}{5} = 3\frac{1}{6}$

30. $-0.4a + 1.2 = 3.6$

31. $\frac{3}{5}h - \frac{2}{5}h + 9 = 6$

32. $-0.25a + 3.8 = 4.6$

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

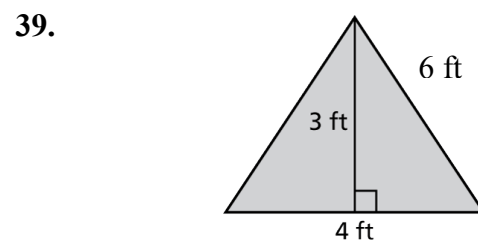
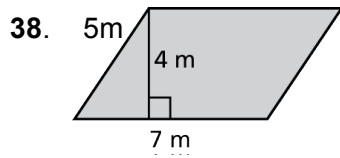
34. $\frac{4}{7}h - \frac{3}{7}h + 12 = 8$

35. $3(n - 4) = 5n + 4$

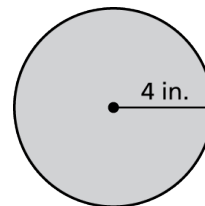
36. $4(n - 5) = 6n + 8$

37. A pencil costs \$0.30 and a pen costs \$0.50. You buy 10 pencils and the total cost is \$7.50. How many pens did you buy?

Find the area and perimeter of the figures.

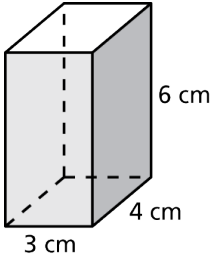


40. What is the circumference of the circle?
Use 3.14 for π .

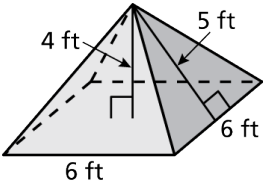


Find the volume of the solids.

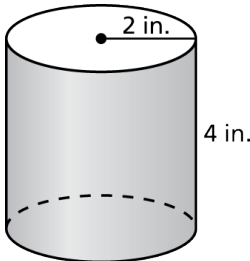
41.



42.



43.



44. On an exam you get two points for each question answered correctly, zero points for each question left blank, and lose one point for each question answered incorrectly. What is your total score on the exam if you answer 22 questions correctly, leave 7 questions blank, and answer 5 questions incorrectly?
45. You and two friends are making a gift basket. You want to keep the cost below \$15 per person. Write and solve an inequality that represents the total cost of the gift basket.
46. If you spend at least \$50 (including shipping) at an online store, you receive a \$10 gift card. You want to purchase CDs that cost \$12 each. If shipping costs \$5, write and solve an inequality to find the number of CDs you must buy to receive the gift card.
47. You put \$1200 in an account that earns 3% simple interest. Find the total amount in the account after four years.

48. The equation $5x + 2y = 20$ represents the cost for a family to attend a play where x is the number of adults and y is the number of children. Find the intercepts and interpret the meaning of each one.
49. A ladder is placed against the side of a house. The top of the ladder is 12 feet above the ground. The base of the ladder is 5 feet away from the house. Find the length of the ladder.