

Name _____ Hour _____ Score _____

Chapter 1 Honors Practice Test

Simplify each expression.

1. $-\frac{1}{5}(-5 + 20p)$

2. $-7(3t - (5 - 8))$

Solve each proportion.

3. $\frac{3}{1.2} = \frac{4}{k}$

4. $\frac{12}{48} = \frac{g}{20}$

Solve each equation. Check your answer.

5. $9y + 1 = 3y - 31$

6. $\frac{1}{7}(t + 7) = 43$

7. $\frac{2h-6}{12} = \frac{2}{4}$

8. $|2x + 11| = -7$

9. $6|8 - y| = 24$

10. $|2x + 1| - 3 = 22$

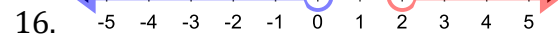
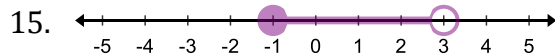
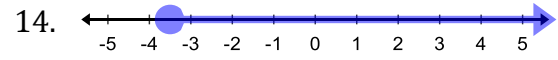
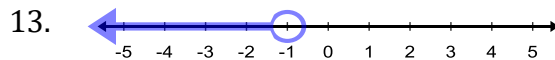
Convert the given amount to the given unit.

11. 260 min; sec

Solve the equation for the given variable.

12. $3a - 5b = -10$ for b

Write an inequality for each graph. Then write the solution in interval notation.



Chapter 1 Honors Practice Test Cont.

Solve each inequality. Check your solution.

17. $|2r + 6| \geq 8$

18. $|3v + 9| \leq 27$

19. $-2 < 3c + 7 < 22$

20. $-3b > 42$ or $4b > -12$

21. $2f \geq -10f + 48$

22. $4x - 8 < -2x + 18$

Define a variable and write an equation to model each situation. Then solve.

23. The scale of a map is 1 cm: 35 mi. Determine the distance between two cities that are 4.2 cm apart on the map.

24. A box of cereal should have a mass of 495 g. The quality control inspector measures the mass of every fiftieth box. The inspector rejects any box that is not within 10 g of the ideal mass. Find the range of acceptable masses. Write and solve an absolute value inequality for this situation.

25. **Writing** Explain how to solve $|2d| - 3 < 9$.