

Algebra 2H
Answers to Summer Review Problems

1. **Z, Q, R**
2. **Q, R**
3. **W, Z, Q, R**
4. **Q, R**
5. **I, R**
6. **I, R**
7. **N, W, Z, Q, R**
8. **N, W, Z, Q, R**
9. **I, R**
10. -13
11. -108
12. -9
13. (a) $2 + 7 = 7 + 2$ (Answers may vary.) The Commutative Property of Addition states that the order of the addends in an addition problem does not affect the outcome (sum).
(b) $2 \cdot 7 = 7 \cdot 2$ (Answers may vary.) The Commutative Property of Multiplication states that the order of the factors in a multiplication problem does not affect the outcome (product).
14. (a) $(2 + 3) + 5 = 2 + (3 + 5)$ (Answers may vary.) The Associative Property of Addition states that the grouping of the addends in an addition problem does not affect the outcome (sum).
(b) $(2 \cdot 3) \cdot 5 = 2(3 \cdot 5)$ (Answers may vary.) The Associative Property of Multiplication states that the grouping of the factors in a multiplication problem does not affect the outcome (product).
15. 1 When any real number is multiplied by 1, its value is unchanged.
16. 0 When any real number is added to 0, its value is unchanged.
17. (a) $\frac{2}{7}$ (b) -3.4
18. (a) $-\frac{4}{3}$ (b) 1
19. (a) $3x - 3y$ (b) $5a + 5b + 10c$ (c) $10 - 2x$
20. (a) $3(x - 2y)$ (b) $b(ac^2 + 3)$
21. An equation states that two expressions are equal.
22. {5}
23. {0}
24. $\left\{\frac{31}{42}\right\}$
25. $\left\{-\frac{2}{43}\right\}$
26. $\left\{-\frac{99}{56}\right\}$

27. {all real numbers}

28. {0}

29. \emptyset (Note: This symbol indicates that the equation has no solution.)

30. $\left\{\frac{11}{6}\right\}$

31. $\left\{\frac{21}{5}\right\}$

32. {-2}

33. $\left\{\frac{4}{3}\right\}$

34. $\left\{m \mid m > -\frac{5}{3}\right\}$



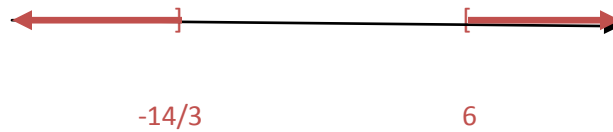
35. $x \mid x \geq -3$



36. $x \mid -11 < x < 3$



37. $\left\{x \mid x \leq -\frac{14}{3} \text{ or } x \geq 6\right\}$



38. $|x-9| \leq 4$

39. $\left\{\frac{P-2l}{2}\right\}$

40. $\left\{\frac{S-2\pi r^2}{2\pi r}\right\}$

41. $\left\{ \frac{I}{pr} \right\}$

42. $\left\{ \frac{q-4sW}{3} \right\}$

43. $x + 3$

44. $2x + 7$

45. $5x - 2$

46. $\frac{4}{x} - 8$

47. $x^2 + 12$

48. $2 < 3(6 + x)$

49. $5(x - 2) = x + 4$

50. $\frac{5}{3}$

51. -8

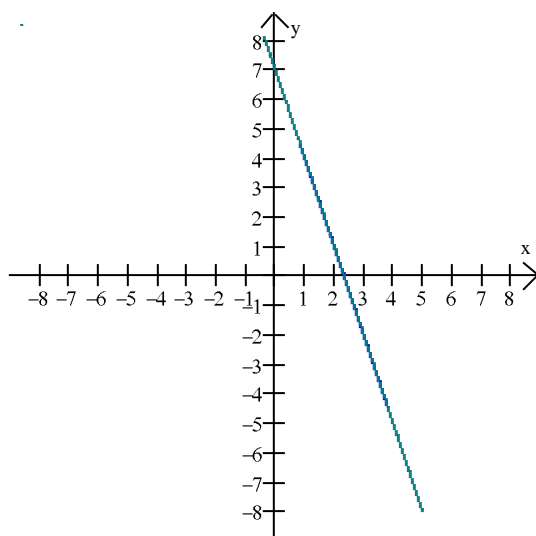
52. $\frac{5}{7}$

53. $\frac{5}{3}$

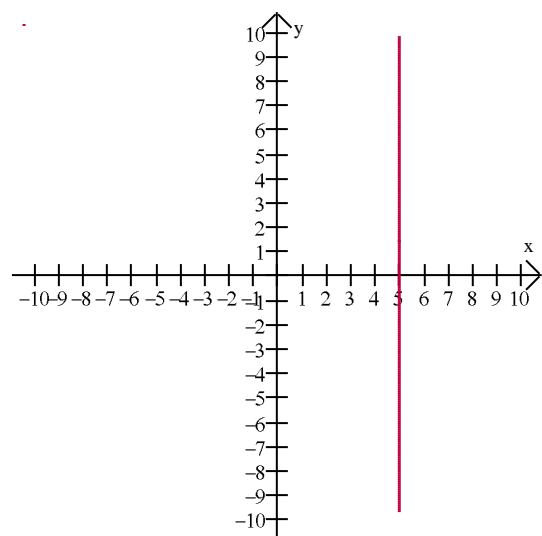
54. $\frac{1}{2}$

55. undefined ("no slope")

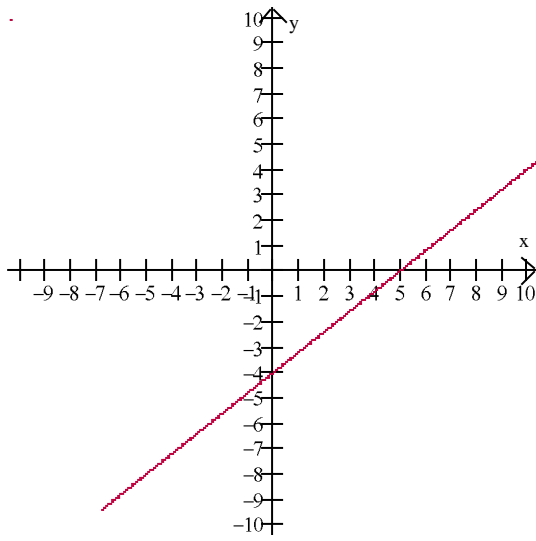
56.



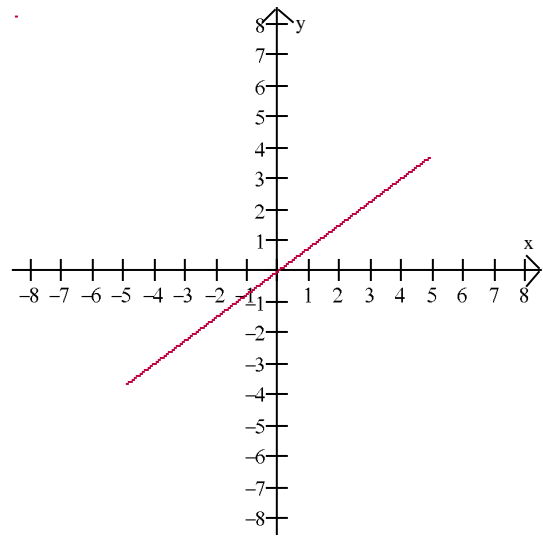
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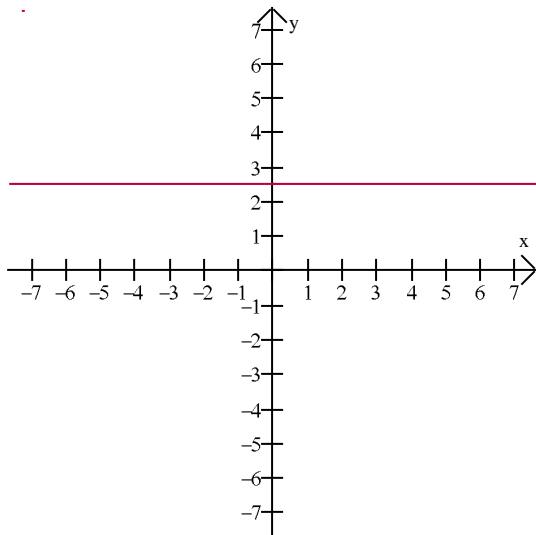
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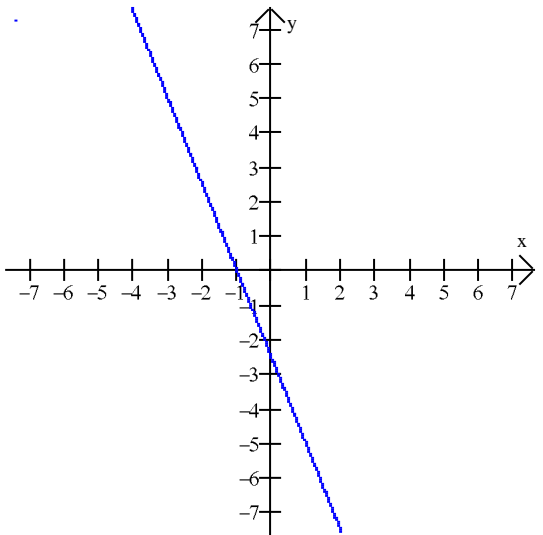
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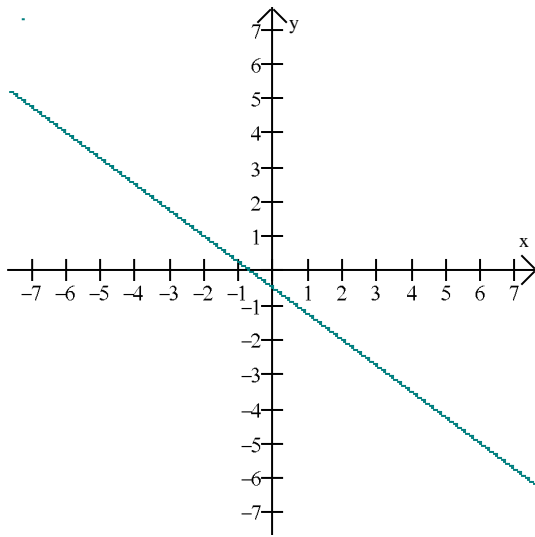
60.



61.



62.



63.

