

**Mathematics 7 Summer Review**  
(Show all work – use additional paper if needed)

Find the sum or difference in simplest form:

1.  $4\frac{3}{8} + 3\frac{11}{12}$       2.  $6\frac{3}{14} - 4\frac{1}{28}$       3.  $2\frac{7}{12} + 9\frac{17}{18}$       4.  $3\frac{2}{7} - \frac{19}{21}$

5.  $7 + (-8)$       6.  $-8 + 5$       7.  $-6 + (-2)$       8.  $5 + (-4)$

9.  $11 - (-5)$       10.  $-1 - (-15)$       11.  $0 + (-6)$       12.  $3 - 5$

Find the product or quotient in simplest form:

13.  $4 * (-5)$       14.  $5 * 19$       15.  $7 * (-4)$       16.  $-8(11)$   
17.  $-3 * (-12)$       18.  $-7 * (-13)$       19.  $0 + (-16)$       20.  $-1 * (-8)$   
21.  $-45 \div (-5)$       22.  $-48 \div 6$       23.  $-35 \div (-7)$       24.  $0 \div 2$   
25.  $18 \div (-2)$       26.  $0 \div (-16)$       27.  $72 \div (-8)$       28.  $-35 \div (-7)$

Solve the following equations:

29.  $m - 8 = 15$       30.  $-7q = 28$       31.  $D - (-2) = 12$       32.  $16 - w = 10$   
33.  $4y + 3 = -17$       34.  $-9c - 4 = -25$       35.  $f - 4.25 = 6.78$       36.  $15 + z = -8$

Simplify the following:

37.  $|-8|$       38.  $|0|$       39.  $|-8 + 3|$       40.  $|-5 + 7|$   
41.  $20 \div 2 - 24 \div 3$       42.  $-4 + 6 * 7$       43.  $-8 + 16 \div (-4)$       44.  $10 - 18 \div (-2) + 4$   
45.  $-2 + (-3) * (-1)$       46.  $19 + -3 * 4 - 2 * 3$       47.  $6 - 8 \div 2 - 10$       48.  $-8 + (-5)7 + 3$   
49.  $(-2)(3 + 8)$       50.  $(12 * 3 - 1) \div 5$       51.  $(7 - 6) + (2 - 3 * 4)$       52.  $(2 * 6 - 4) \div (4 - 8)$

Solve the following:

53. The Fairbanks, Alaska, a typical January temperature is  $-13^{\circ}\text{F}$  and a typical April temperature is  $30^{\circ}\text{F}$ . What is the difference between these temperatures?
54. The price of a share of stock increased \$3 each week over a 7-week period. What was the total change in the price of a share of the stock over this period of time?
55. Mr. Pearce wanted to write a check for \$85. He noticed that he had only \$80 in his checking account. What integer shows what Mr. Pearce's checking account balance would have been if he had written the check?

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56. How is the following mathematical phrase written as an algebraic expression?  
Fifty less than the product of eight and a number
57. A lion's heart beats 12 times in 16 seconds. How many times does a lion's heart beat in 60 seconds?
58. What is 85% of 62?
59. Find the percent of increase from 400 to 540.
60. Danielle has a night stand with a tabletop in the shape of a pentagon. If one side length of the tabletop is 18 inches, what is its perimeter?
61. Barry's backyard is a square plot of land with a side length of 47 feet. What is the perimeter of Barry's backyard?
62. Catherine worked 23 hours last week babysitting. She earned \$126.50. What was Catherine's rate of pay?
63. Sharon drove 188.3 miles to see a softball game. If she was driving for  $3\frac{1}{2}$  hours, what was her average rate of speed?
64. Kelvin pumped 15.2 gallons of gas into his car. If he paid \$59.13 for the total amount of gas, what was the rate per gallon that Kelvin paid?
65. Nia found the following prices for shorts: \$25, \$28, \$19, \$20, \$18, \$19, \$32, and \$29. Find the mean, median, and mode for the prices.
66. What is the probability of rolling a number greater than 2 on a number cube?
67. What is the volume of a rectangular prism with side lengths 15.8 m, 24.5 m, and 4.2 m? Round to the nearest cubic meter.
68. Write 84% as a fraction in simplest form.
69. Rose bought 5 pencils for \$0.69 each, 3 notebooks for \$ 2.75 each, and a pocket dictionary for \$5.49. How much change will she receive from \$20?
70. Susan needs material for her school project. She buys 3.75 yards of material at \$5.72 a yard. What is the total cost of the material? Round to the nearest cent.

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Solve each one-step and two-step equations.

1.  $-5x = 35$

2.  $m - 8 = -5$

3.  $b - (-10) = -25$

4.  $\frac{n}{5} = 10$

5.  $-3y + 6 = 30$

6.  $6b - 12 = -48$

7.  $\frac{c}{4} - 18 = 4$

8.  $25 + z = -15$

9.  $14 - d = 24$

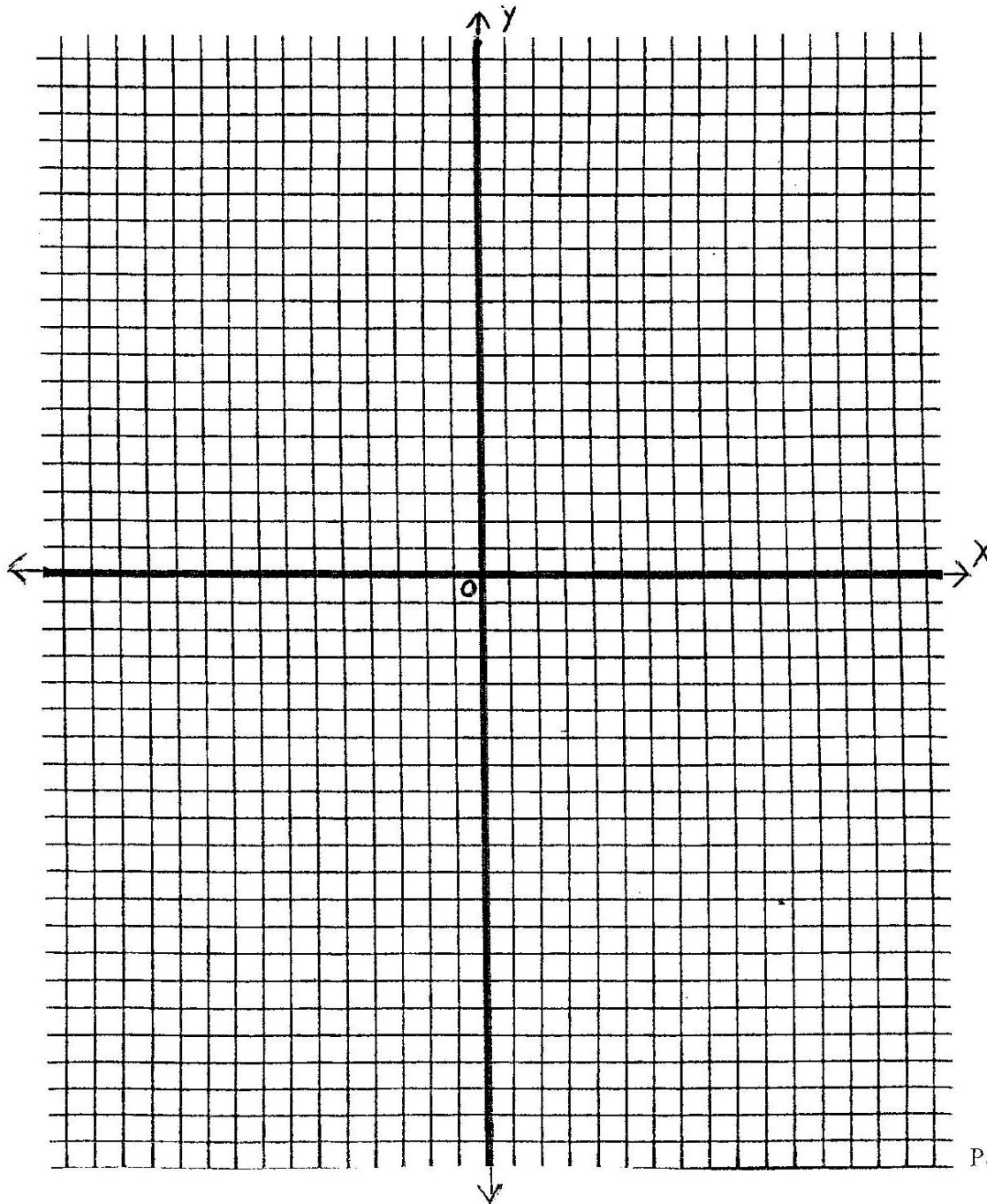
10.  $-x = 20$

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Locate the following points on a coordinate plane and connect them in order with straight line segments. What picture is formed?

$(X,Y) = (-12, 12), (-10, 8), (-8,4), (-7, 2), (-4, -4), (-1, -9), (0, -11),$   
 $(1, -9), (4, -4), (7, 2), (8, 4), (10, 8), (12, 12), (8, 12), (6, 8), (4, 4),$   
 $(0, -4), (-4, 4), (-6, 8), (-8, 12)$



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