Getting Ready For Pre-Algebra

Name:_____

Directions for Summer Packet

1. Students should complete all work in a notebook. This notebook should be the same notebook that they will use for class starting in September.

2. All work must be completed in pencil.

3. Each step to the problem must be shown.

4. All work should be completed without a calculator.

5. The notebook with the completed work must be brought to school the first day of school.

Solve each equation. Show all work.

1) $x + 3 = 7$

2) $y - 2 = 5$

3) $m + 4 = -2$

4) $n + 2 = -5$

5) $5 + p = 11$

6) $z - 2 = 1$

7) $5p = 20$

8) $3q = -18$

9) $-2n = -6$

Multiply.

1) 0.3×6

2) 5.1×2.3

3) 1.2×1.7

4) 0.15×1.23

5) 11.5×0.47

6) 0.3×3.12

7) 1.023×3

8) 2.14×4.37

9) 5×2.058

10) 3.1×4.356

11) 11.1×2.12

12) 3.355×2.784

Divide. Round answers to the nearest hundredth if necessary.

1) $9.6 \div 3.2$

2) $1.12 \div 6.3$

3) $3.25 \div 1.3$

4) $9.072 \div 2.1$

5) $3.68 \div 0.92$

6) $74.2 \div 0.53$

7) $18.98 \div 5.2$

8) $5.183 \div 3.65$

9) $22.94 \div 3.7$

Express each fraction as a percent.

10) $7\dfrac{1}{3} - 3\dfrac{5}{9}$

11) $4\dfrac{7}{10} - 1\dfrac{3}{5}$

12) $5\dfrac{2}{7} + 2\dfrac{2}{3}$

Multiply. Write each answer in simplest form.

1) $\dfrac{3}{5} \times \dfrac{1}{6}$

2) $\dfrac{5}{7} \times \dfrac{8}{15}$

3) $\dfrac{3}{8} \times \dfrac{5}{7}$

4) $\dfrac{5}{6} \times \dfrac{3}{5}$

5) $\dfrac{3}{7} \times \dfrac{2}{3}$

6) $\dfrac{4}{11} \times \dfrac{1}{8}$

7) $2 \times \dfrac{3}{10}$

8) $\dfrac{11}{15} \times 4$

9) $1\dfrac{1}{3} \times 4\dfrac{1}{2}$

10) $2\dfrac{1}{4} \times 3\dfrac{1}{9}$

11) $5\dfrac{1}{3} \times 1\dfrac{4}{5}$

12) $\dfrac{3}{7} \times 1\dfrac{4}{9}$

Divide. Write each product in simplest form.

1) $\dfrac{3}{8} \div \dfrac{6}{7}$

2) $\dfrac{2}{5} \div \dfrac{9}{10}$

3) $\dfrac{11}{13} \div \dfrac{22}{26}$

4) $3\dfrac{1}{4} \div \dfrac{2}{3}$

5) $\dfrac{3}{5} \div \dfrac{1}{4}$

6) $1\dfrac{2}{9} \div \dfrac{1}{3}$

7) $\dfrac{4}{5} \div \dfrac{21}{25}$

8) $\dfrac{3}{7} \div \dfrac{8}{9}$

9) $\dfrac{1}{18} \div \dfrac{5}{6}$

1) $\dfrac{13}{20}$ 2) $\dfrac{9}{10}$ 3) $\dfrac{73}{100}$

4) $\dfrac{2}{5}$ 5) $\dfrac{4}{5}$ 6) $\dfrac{11}{11}$

7) $\dfrac{3}{4}$ 8) $\dfrac{19}{20}$ 9) $\dfrac{23}{25}$

Express each percent as a fraction in simplest form.

1) 37%   2) 20%   3) 5%

4) 22%   5) 68%   6) 86%

7) 17%   8) 10%   9) 75%

Simplify. Write each answer in simplest form.

1) $\dfrac{3}{7} + \dfrac{1}{7}$ 2) $\dfrac{5}{6} + \dfrac{3}{12}$ 3) $\dfrac{7}{8} + \dfrac{11}{12}$

4) $\dfrac{9}{10} - \dfrac{1}{6}$ 5) $\dfrac{4}{5} - \dfrac{1}{6}$ 6) $\dfrac{5}{9} + \dfrac{7}{15}$

7) $9\dfrac{2}{7} + 3\dfrac{4}{7}$ 8) $6\dfrac{5}{6} + 2\dfrac{1}{3}$ 9) $2\dfrac{3}{8} + 3\dfrac{3}{10}$

Simplify.

1) 7 – 11

2) -3 – 12

3) -12 + 6

4) 5 + (-4)

5) 17 + (-19)

6) -3 – (-7)

7) 5 – 7

8) -7 – (-4)

9) -9 + 2

10) -2 – 3

11) 11 – 17

12) 4 + (-7)

13) (-5)(-7)

14) 3(-4)

15) -2(7)

16) -3(-11)

17) -5(12)

18) 4(-8)

19) 15(-3)

20) (-6)(-6)

21) -9(12)

22) 21 ÷ (-3)

23) -15 ÷ (-5)

24) 20 ÷ 4

25) -12 ÷ (-2)

26) -22 ÷ 11

27) -64 ÷ (-4)

28) 32 ÷ (-8)

29) -18 ÷ 3

30) -24 ÷ (-8)