

Geometry ND Summer Packet

This will be due the Monday of the first full week of school. Students will have a TEST over this material during the first full week of school

Solve each equation.

1) $6 = \frac{a}{4} + 2$

2) $-6 + \frac{x}{4} = -5$

3) $9x - 7 = -7$

4) $0 = 4 + \frac{n}{5}$

5) $-4 = \frac{r}{20} - 5$

6) $-1 = \frac{5+x}{6}$

7) $\frac{v+9}{3} = 8$

8) $2(n+5) = -2$

9) $-9x + 1 = -80$

10) $-6 = \frac{n}{2} - 10$

11) $-2 = 2 + \frac{v}{4}$

12) $144 = -12(x+5)$

Solve each equation. Show all work.

1) $6 + r = 2r + 3$

2) $3 + 3m = 2m + 3$

3) $1 - 3x = -5 - x$

4) $3x - 2 = -4 + 3x$

5) $1 + 2b = 1 + 3b$

6) $-1 + 3b = -4 + 2b$

7) $-4x - 1 = -4x - 4 + 4$

8) $-6r + 2r = -2 - 5r$

9) $a - 2 = -1 + 2a - 4 - 1$

10) $v + 1 = -2 + 2v$

Add the following fractions. Remember, you need to get a common denominator first. Students should be able to add, subtract, multiply, and divide fractions WITHOUT using a calculator,

1) $\frac{4}{5} + \frac{4}{7}$

2) $\frac{1}{2} + \frac{11}{8}$

3) $\frac{1}{5} + \frac{1}{3}$

4) $\frac{7}{9} + \frac{1}{3}$

5) $\frac{1}{2} + \frac{1}{7}$

6) $\frac{5}{8} + \frac{2}{3}$

Multiply the two fractions

1) $\frac{21}{30} \times \frac{2}{3}$

2) $\frac{3}{10} \times \frac{5}{6}$

3) $\frac{7}{12} \times \frac{2}{3}$

4) $\frac{12}{7} \times \frac{5}{8}$

5) $\frac{3}{4} \times \frac{5}{4}$

6) $\frac{2}{9} \times \frac{3}{5}$

Answer KEY

Solving equations

- | | | | | | |
|-------------|-------------|------------|--------------|---------------|---------------|
| 1) $a = 16$ | 2) $x = 4$ | 3) $x = 0$ | 4) $n = -20$ | 5) $r = 20$ | 6) $x = -11$ |
| 7) $v = 15$ | 8) $n = -6$ | 9) $a = 4$ | 10) $v = 3$ | 11) $v = -16$ | 12) $x = -17$ |

Second solving equations

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|----------------|-------------|------------|----------------|------------|-------------|
| 1) $r = 3$ | 2) $m = 0$ | 3) $x = 3$ | 4) no solution | 5) $b = 0$ | 6) $b = -3$ |
| 7) no solution | 8) $r = -2$ | 9) $a = 4$ | 10) $v = 3$ | | |

Adding the fractions

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|------------|-----------|-----------|-----------|-----------|------------|
| 1) $48/35$ | 2) $15/8$ | 3) $8/15$ | 4) $10/9$ | 5) $9/14$ | 6) $31/24$ |
|------------|-----------|-----------|-----------|-----------|------------|

Multiplying fractions

- | | | | | | |
|-----------|------------------|-----------|------------|------------|-----------|
| 1) $7/15$ | 2) $\frac{1}{4}$ | 3) $7/18$ | 4) $15/14$ | 5) $15/16$ | 6) $2/15$ |
|-----------|------------------|-----------|------------|------------|-----------|