

POLYNOMIAL PREVIEW – TEACHER RESOURCE

GROUP 1

With your group, solve the following problems. Show all necessary work.

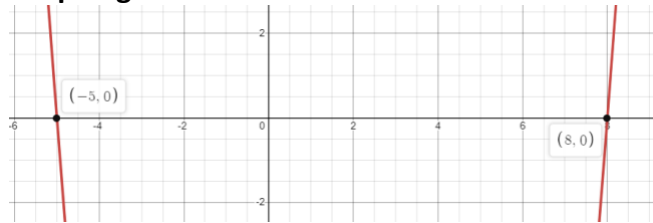
1. Simplify

$$\frac{7g^3h^2 + 3g^2h - 2gh^3}{gh} = \frac{7g^3h^2}{gh} + \frac{3g^2h}{gh} - \frac{2gh^3}{gh}$$
$$= 7g^2h + 3g - 2h^2$$

2. Solve

$$x^2 - 3x - 40$$

Graphing:



Factoring:

$$x^2 - 3x - 40 = (x + 5)(x - 8)$$

GROUP 2

With your group, solve the following problems. Show all necessary work.

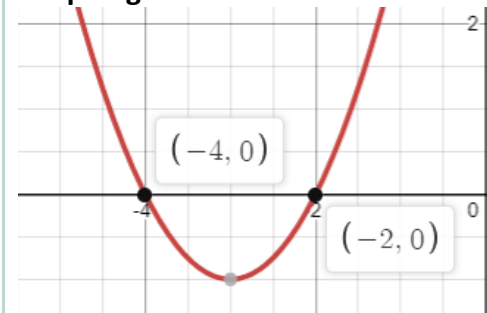
1. Simplify

$$\frac{5x^2y - 10xy + 15xy^2}{5xy} = \frac{5x^2y}{5xy} - \frac{10xy}{5xy} + \frac{15xy^2}{5xy}$$
$$= x - 2 + 3y$$

2. Solve

$$x^2 + 6x + 8$$

Graphing:



Factoring:

$$x^2 + 6x + 8 = (x + 2)(x + 4)$$

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GROUP 3

With your group, solve the following problems. Show all necessary work.

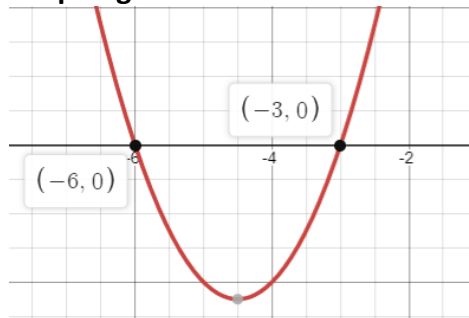
1. Simplify

$$\frac{24a^3b^2 - 16a^2b^3}{8ab} = \frac{24a^3b^2}{8ab} - \frac{16a^2b^3}{8ab}$$
$$= 3a^2b + 2a^2b^2$$

2. Solve

$$x^2 + 9x + 18$$

Graphing:



Factoring:

$$x^2 + 9x + 18 = (x + 3)(x + 6)$$

GROUP 4

With your group, solve the following problems. Show all necessary work.

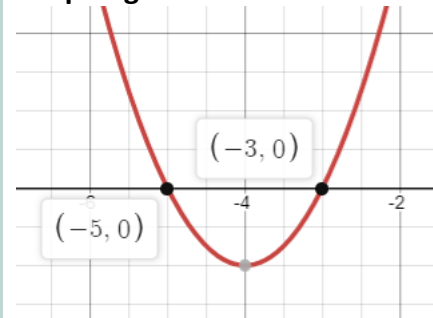
1. Simplify

$$\frac{4a^3b - 6ab + 2ab^2}{2ab} = \frac{4a^3b}{2ab} - \frac{6ab}{2ab} + \frac{2ab^2}{2ab}$$
$$= 2a^2 - 3 + b$$

2. Solve

$$x^2 + 8x + 15$$

Graphing:



Factoring:

$$x^2 + 8x + 15 = (x + 5)(x + 3)$$