

TRIPLES ACTIVITY

27

Simplify:

$$\frac{x^6 y^3}{5 \cdot 3} \cdot (x^2 y^2)^2$$

14

Simplify:

$$3x^4 y \cdot 2xy^3 - 5x^5 y^4$$

20

Simplify:

$$\frac{30x^5 y^4}{2 \cdot 2 \cdot 2} \cdot 2x^3$$

1

Simplify:

$$(x^3 y) \cdot (x^2 y^3)$$

2

Simplify:

$$\frac{120x^8 y^2}{6x^2}$$

EXPONENT RULES

(Positive Exponents Only)

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EXPONENT RULES

Triples Activity

Objective: Students will practice using the product, power, and quotient exponent rules to simplify monomial expressions. Addition and subtraction of monomials is included. Most cards require at least two rules to simplify. **This activity includes positive exponents only.** [Click here for a version of this activity with negative exponents.](#)

Description: There are 30 total cards. Once matched, there will be 10 sets of three cards, each with the same answer.

Ways to use this activity:

(1) I recommend that students work in groups of 2-4 for this activity. Print the cards and distribute to each group. They cut the cards out and divide them between group members so each person is responsible for certain cards. They can use loose-leaf notebook paper to show their work or write on the back of the card. Once all cards are solved, they match all the "triples" together. The triples are the cards with the matching answers.

I have my students staple their triples together and place in a zip-lock bag for a grade. Simply write their names on the bag with a sharpie. I provided a simple answer key for you to use to ensure they are matched together correctly.

(2) Use the activity as a means of grouping students! Give each student one card. Students must look for the two people in the room with a card with the same answer.

SAMPLE TRIPLES: Each row of three cards below share an answer.

1 Simplify:
 $(x^3 y) \cdot (x^2 y^3)$

4 Simplify:
 $3x^4 y \cdot 2xy^3 - 5x^5 y^4$

27 Simplify:
 $\frac{x^6 y^3}{x^5 y^3} \cdot (x^2 y^2)^2$

2 Simplify:
 $\frac{120x^8 y^2}{6x^2}$

20 Simplify:
 $\frac{30x^5 y^4}{3x^2 y^2} \cdot 2x^3$

28 Simplify:
 $(-2x^5 y) \cdot (-10xy)$