

Unit 6 Lesson 22: Combining Like Terms (Part 3)

1 Are They Equal? (Warm up)

Student Task Statement

Select all expressions that are equal to $8 - 12 - (6 + 4)$.

1. $8 - 6 - 12 + 4$
2. $8 - 12 - 6 - 4$
3. $8 - 12 + (6 + 4)$
4. $8 - 12 - 6 + 4$
5. $8 - 4 - 12 - 6$

2 X's and Y's

Student Task Statement

Match each expression in column A with an equivalent expression from column B. Be prepared to explain your reasoning.

A

1. $(9x + 5y) + (3x + 7y)$

2. $(9x + 5y) - (3x + 7y)$

3. $(9x + 5y) - (3x - 7y)$

4. $9x - 7y + 3x + 5y$

5. $9x - 7y + 3x - 5y$

6. $9x - 7y - 3x - 5y$

B

1. $12(x + y)$

2. $12(x - y)$

3. $6(x - 2y)$

4. $9x + 5y + 3x - 7y$

5. $9x + 5y - 3x + 7y$

6. $9x - 3x + 5y - 7y$

3 Seeing Structure and Factoring

Student Task Statement

Write each expression with fewer terms. Show or explain your reasoning.

1. $3 \cdot 15 + 4 \cdot 15 - 5 \cdot 15$

2. $3x + 4x - 5x$

3. $3(x - 2) + 4(x - 2) - 5(x - 2)$

4. $3\left(\frac{5}{2}x + 6\frac{1}{2}\right) + 4\left(\frac{5}{2}x + 6\frac{1}{2}\right) - 5\left(\frac{5}{2}x + 6\frac{1}{2}\right)$