## Unit 4 Lesson 11: 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

## B

1. $(9 x+5 y)+(3 x+7 y)$
2. $(9 x+5 y)-(3 x+7 y)$
3. $(9 x+5 y)-(3 x-7 y)$
4. $9 x-7 y+3 x+5 y$
5. $9 x-7 y+3 x-5 y$
6. $9 x-7 y-3 x-5 y$
7. $12(x+y)$
8. $12(x-y)$
9. $6(x-2 y)$
10. $9 x+5 y+3 x-7 y$
11. $9 x+5 y-3 x+7 y$
12. $9 x-3 x+5 y-7 y$

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