Expressions Quiz Review: I can add, subtract, multiply and factor linear expressions.

Simplify the following problems:
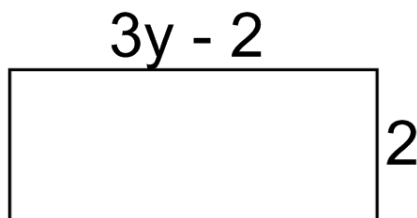
1) $4x - 5y + 12x + 3x$
2) $13x + \frac{2}{3}y + 11 + \frac{1}{4}y + 9$
3) $13x + 2 - 5y + 6y + 8 - x$
4) $x + \frac{2}{3}x + 6 + \frac{3}{5}x$
5) $2(5x - 1) + 3x$
6) $6x + 3(2x + 7)$
7) $7 - (3x - 4)$
8) $5(-2x + 4) + 3x - 2$
9) $(6x - 5) + (-11x + 6)$
10) $\frac{3}{4}(8x - 12) - \frac{1}{2}(2x - 4)$
11) $(-2x + 7) - (3x + 22)$
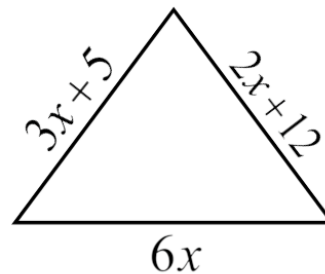
Factor out a GCF for the following problems:

12) $3x - 12$
13) $8x + 12y - 6$
14) $-6x + 15$
15) 4 friends went to the movies. Their bill was $4x + 24$, where x is the price of a movie ticket and $24 was price for popcorn and drinks. If the friends split the bill evenly amongst the 4 of them, what expression represents the amount each friend had to pay?
16) The area of a rectangle is $4x + 12$ and the length is $x + 3$. What is the width of the rectangle?
17) If the area of a rectangle is $6x + 4$ and the width is 2, what is the length?

Solve the following problems:

18) Find the Area

3y - 2

2

19) Find the Perimeter

3x + 5

2x + 12

6x

20) Find the Area and the Perimeter

x + 4

3