

2. Compare the two expressions using $<$, $>$, or $=$.

For each, explain how you can find the **exact** answer **without doing all the math**.

a. $20 \times (5 \times 6)$ $<$ 100×7

I know $20 \times 5 = 100$ so $100 \times 6 = 600$, and $100 \times 7 = 700$ so 600 is less than 700 .

b. 36×12 $>$ $40 \text{ twelves} - 5 \text{ twelves}$

$40 - 5 = 35$, 35 is less than 36 , so 36 twelves is more than 35 twelves .

c. 9×8 $=$ 4 nines, doubled

4 doubled is 8 so 4 nines doubled is equal to 9×8 .

HINT: Remember to look at the words – what does *40 twelves* mean? What is *doubled*?

3. Solve. Use words, numbers, or pictures to explain how your answers to Parts (a) and (b) are related.

a) $14 \times 30 =$ _____

$$(30 \times 10) + (30 \times 4)$$
$$\begin{array}{r} \downarrow \\ 300 + 120 = 420 \end{array}$$

b) $1.4 \times 30 =$ 14 tenths $\times 30 =$ 420 tenths

$$420 \text{ tenths} = 42$$

The parts are related because it is the same digits. I just have to shift the place value and rename the unit.

How are (a) and (b) related? (Hint: Think about place value).