

Warm Up 1.6

Name _____ Period _____

1. When Mr. Lemon came to school he got talking with Mrs. Price in the commons area of the school and made the following observation while he was there chatting it up. It blew him away as to how mathematical it was. Check it out!

(The observations are listed in order of their occurrence.)

- When he started talking there were some students in the commons area.
- A few minutes later the number of students in the commons area had double.
- He observed a group of 30 students enter the commons area from the auditorium.
- Later half of the students in the commons area left.
- The last thing Mr. Lemon noticed was that seven students were in the commons area.

How many students were in the commons area when Mr. Lemon and Mrs. Price started talking?

Find the solution to this question and create an equation that would model what happened!
(TURN OVER)

Warm Up 1.6

Solve each equation and provide a justification for each step.

2.

$$\frac{x + 8}{4} = 3$$

Justification

3.

$$\frac{x}{4} + 8 = 3$$

Justification

4. Determine whether the two expressions below are equivalent to one another.

$$-9(2x + 1) + 5$$

$$\frac{-36x + 28}{2}$$