8th Grade
Lesson 80

- I can calculate increases in percent.

The price of peanuts in Beijing went up 10% last year. If the old price was 60 yuan, what is the new price?

10% of lastyear = Increase

(0.1)(60) = 6

60 + 6 = 66 yuan

The new price is the increase added to the old price.

To their dismay, the townspeople found that the rodent population had increased 140 percent. If the rodent population had been 400 before, what was the rodent population now?

percent of old = Increase

140% of 400 = I

(1.4)(400) = I

560 = I

400 + 560 = 960 rodents

Old + Increase = New

The number of cheering fans increased from 60 to 240. What percent increase was this?

60 + ___ = 240

Increase = 180

$\frac{P \cdot 60}{60} = \frac{180}{60}$

P = 3

3 · 100 = 300%

The number of acorns on the ground increased 240 percent during the storm. If 5400 acorns were on the ground before the storm, how many were on the ground after the storm?

$240\% \text{ of } 5400 = I$

$(2.4)(5400) = I$

$12960 = I$

$5400 + 12960 = N$

$18{,}360 = N$

18,360 acorns

The number increased from 40 to 280.
What percent increase was this?

$40 + I = 280$

$-40 \qquad -40$

$I = 240$

$\frac{(P)(40)}{40} = \frac{240}{40}$

$P = 6$

600%

Assignment:

Problem Set 80 (all) due ~~Monday~~ Wednesday;
Test #18 ~~Tomorrow~~ Monday