

Warm up

1) Last year, a certain stock price was \$48. This year, it is \$53. What was the percent change?

$$\frac{53-48}{48} = \frac{5}{48} = 0.1041666\bar{6}$$

10.42%

2) In 1980, there were 168 students enrolled at West High School. Between 1980 and 1990, the high school experienced a 40% increase in enrollment. How many students were enrolled at the school in 1990? 40% ↑ 140%

$$1.4(168) = 235.2$$

↑
235 students

To find percent change...

$$\% \text{ change} = \frac{\text{difference}}{\text{original}}$$

For problems where you know the percent change...

-always starting with 100%

-always finding a percentage of the ORIGINAL number

Target is running a 35% off sale on everything in the store. How much would you pay for a comforter that is normally \$238?

$$0.65(238)$$

$$154.7$$

$$\$154.70$$

Barry decided to invest his money in Amazon.com stock. Since he bought it, it has gone down by 16.23%. If he has \$430 in Amazon.com stock now, how much money did he invest? $100\% - 16.23\% = 83.77\%$

$$\begin{array}{r} 0.8377x = 430 \\ \hline 0.8377 \quad 0.8377 \\ \hline x = 513.3102543 \\ \hline \text{\$} 513.31 \end{array}$$

When Lance bought his car, it cost \$19,000. Now it is worth \$13,350. What is the percent change in the value of the car?

$$\frac{19000 - 13350}{19000} = \frac{5650}{19000}$$

$$= 0.297368421$$

$$29.74\%$$

This year, Katie got a 4.5% raise. If her current salary is \$62,595, what was her salary last year?

104.5%

$$\frac{1.045x}{1.045} = \frac{62595}{1.045}$$

$$x = 59899.52153$$

\$59899.52

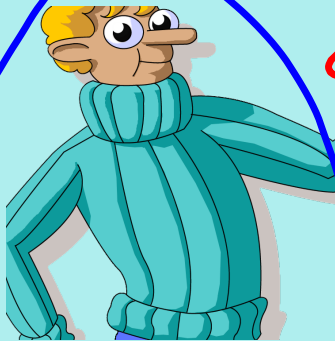
100%
- 25%

75%

Collina's Clothing

Pi Day Sale!

25% off

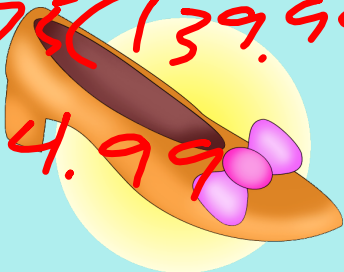


Sweaters
reg. \$52.99

0.75(52.99)
\$39.74

Shoes
reg. \$139.99

0.75(139.99)
\$104.99



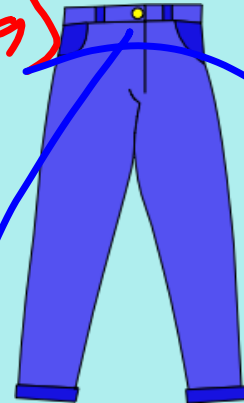
0.75(85.99)
\$64.49

Coats
reg. \$85.99



Hats
reg. \$38.99

0.75(38.99)
\$29.24



Pants
reg. \$35.99

0.75(35.99)
\$26.99



100%
- 15%

85%

McGarry's Market

St. Patrick's Day
Sale!

15% off

0.85(69.99)
\$ 59.49



Coats

reg. \$69.99



Sweaters

reg. \$47.99

0.85(47.99)
\$ 40.79



Pants

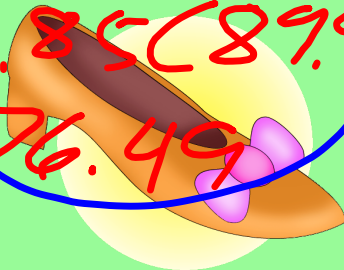
reg. \$31.99

0.85(31.99)
\$ 27.19

Shoes

reg. \$89.99

0.85(89.99)
\$ 76.49



Hats

reg. \$29.99

0.85(29.99)
\$ 25.49



December 5, 2021

