

Task. Adrian paid \$112 for a few pens after the 20% discount. With the money he saved from the discount, he would be able to buy 4 more pens. Find the original price of one pen.

Solution. By assumption \$122 constitute 80% of the original price of all pens, whence that original price is

$$\frac{112}{0.8} = \$140,$$

and so Adrian saved

$$140 - 112 = \$28.$$

By another assumption for these saved money Adrian could buy 4 pens, whence the original price of one pen is

$$x = \frac{28}{4} = \$7.$$

Answer. \$7.