Fraction word problems (unit fraction)

1. Seamstress Jamie is making uniforms for a well-known company. She used 4 packs of buttons and 2 bolts of cloth for the uniforms she sewed and had nothing left over. If each set of uniform is made with $\frac{1}{20}$ packs of buttons, how many uniforms did she sew?

2. Shane has 21 meters of yellow ribbon and 42 meters of lace. For hat-making, she wants to cut the yellow ribbon into smaller pieces measuring $\frac{3}{7}$ meters each. How many smaller ribbons will she have?

3. She used $\frac{1}{3}$ of a package of sequins and $\frac{4}{5}$ spools of sewing thread to make 4 long gowns. If she uses the same measurements to make 7 long gowns, how many packages of sequins will she need?

4. Her assistant can sew 5 identical pairs of pants in $\frac{1}{4}$ of a day. How long would her assistant take to sew 1 pair? Using the same rate, how long would her assistant take to sew 12 identical pairs of pants?

5. Francine used $\frac{5}{7}$ meters of yarn to string one notebook. If she has 70 meters of yarn, how many notebooks can she string?

6. Shelby used $\frac{3}{4}$ of a lace roll for her bulk order of skirts. The next day, she used all the remaining lace to make 8 identical dresses she designed. How much of the lace roll was used for each dress?

Answers

1. $4 \div \dfrac{1}{20} = 80$

   She made 80 uniforms.

2. $21 \div \dfrac{3}{7} = 49$

   She can have 49 smaller pieces of yellow ribbon.

3. $\dfrac{1}{3} \div 4 \times 7 = \dfrac{7}{12}$

   She needs $\dfrac{7}{12}$ pack of sequins for 7 long gowns.

4. $\dfrac{1}{4} \div 5 = \dfrac{1}{20}$

   It takes $\dfrac{1}{20}$ day to sew 1 pair of pants.

   $\dfrac{1}{20} \times 12 = \dfrac{3}{5}$

   Her assistant can sew 12 identical pairs in $\dfrac{3}{5}$ of a day.

5. $70 \div \dfrac{5}{7} = 98$

   She can string 98 notebooks from 70 m of yarn.

6. $(1 - \dfrac{3}{4}) \div 8 = \dfrac{1}{4} \div 8 = \dfrac{1}{32}$

   She used $\dfrac{1}{32}$ of the lace roll for each dress.