27, 28, and 30 days, respectively. (4.) 40 bushels. (5.) 34560 rails, 13 ft. long. (6.) Art. 56. (7.) 649195944494. (8.) A goes 9 miles, B, 6, C, $4\frac{1}{2}$ and D, 4. (9.) 1400 rods. (10.) A, 2; B, 3; C, 4.

FRACTIONS.

X.—Page 46.

(1.) Art. 64. (3.) $\frac{11}{20}$. (4.) $\frac{6132227}{6380088}$; $\frac{6120884}{6380088}$; $\frac{6131339}{6380088}$; $\frac{143}{440}$. (5.) $\frac{13}{28}$. (6.) $\frac{4}{5}$. (7.) Art. 72; 1. (8.) 1. (9.) $\frac{29}{150}$; $2\frac{103}{182}$. (10.) 1.

XI.—Page 47.

(2.) $\frac{162889}{720000}$ of £100. (3.) $\frac{144}{175}$; 36025 min. (4.) 3d. 16h. 6m. $22\frac{1}{2}$ sec. (5.) $\frac{6442}{64}$. (6.) 1520 tons. (7.) £4 8s. $1\frac{3}{4}$d. $\frac{307}{725}$q. (8.) The unit is 24 cwt., of which $2\frac{14}{37}$ cwt. is tin, and $21\frac{23}{37}$ cwt. copper. (9.) The length of the measuring rod is $28\frac{7}{82}$ inches, and is contained $98\frac{230}{329}$ times in 77 yards, which is not so near 99 times as by $\frac{99}{329}$ in defect. The distance, therefore, which approaches nearest to 77 yards is 99 times the length of the measuring rod. (10.) If the error be *in defect*, the apparent length is 502 yards, and $24\frac{1}{2}$ inches over. If the error be *in excess*, the apparent length is 499 yards, and $3\frac{5}{8}$ inches over.

XII.—Page 48.

(1.) $7\frac{13}{16}$. (2.) $\frac{1}{21}$. (3.) $\frac{1133889}{7889940}$. (4.) $140\frac{1}{3}$ yds.; \$6.31$\frac{1}{2}$. (5.) \$29333.33$\frac{1}{3}$. (6.) $\frac{7}{22}$; $1\frac{128}{1188}$. (7.) Lost \$400. (8.) £27 10s. (9.) 25 men. (10.) $1\frac{3}{7}$.

XIII.—Page 50.

(1.) Art. 71. (2.) $\frac{14}{15}$. (3.) \$6000. (4.) $\frac{1133889}{3944770}$. (5.) $2800\frac{21}{44}$. (6.) $\frac{45}{121}$ of an hour. (7.) \$53.10. (8.) $\frac{181}{421}$. (9.) 1200; Irish, 480; Scotch, 360; English, 360. (10.) \$9561.31$\frac{3}{7}$.