Patterns with Equivalent Fractions

Solve.

1. A nurse works 2 out of every 3 days. Fill in the boxes to continue the pattern of days she must work. \( \frac{2}{3}, \frac{4}{6}, \frac{6}{12}, \frac{16}{?} \)

2. Of the teams in a tournament, \( \frac{16}{32} \) of the teams are in Bracket A. After the first round \( \frac{8}{16} \) will be in Bracket A. After the second round \( \frac{4}{8} \) of the teams will be in Bracket A. What fraction of the teams will be in Bracket A after the third round and then after the fourth round?

3. Reggie has soccer practice 3 out of every 5 days. Fill in the boxes to continue the pattern of days that he has soccer practice. \( \frac{3}{5}, \frac{6}{10}, \frac{12}{?} \)

4. On Monday, Joe walked \( 3\frac{3}{4} \) miles. On Tuesday, Joe walked \( 3\frac{12}{16} \) miles. On Wednesday, Joe walked \( 3\frac{48}{64} \) miles. If the pattern continues how many miles did he walk on Thursday?

5. The first fraction in a sequence is \( \frac{5}{8} \). The fourth fraction is \( \frac{320}{512} \). What are the second and third fractions? Identify the pattern.

6. The first fraction in a sequence is \( \frac{800}{600} \). The fourth fraction is \( \frac{100}{75} \). What are the second and third fractions? Identify the pattern.