Year 7 Maths Homework: Term 4, Week 3: Due Friday 29 October

Q.1. What fraction has been shaded in the figures below?
(a) \[
\begin{array}{c}
\square \\
\square \\
\square \\
\square
\end{array}
\]
(b) \[
\begin{array}{c}
\circle \\
\circle \\
\circle
\end{array}
\]
(c) \[
\begin{array}{c}
\square \\
\square \\
\square \\
\square
\end{array}
\]
(d) \[
\begin{array}{c}
\square \\
\square \\
\square
\end{array}
\]
(e) \[
\begin{array}{c}
\circle \\
\circle
\end{array}
\]
(f) \[
\begin{array}{c}
\circle
\end{array}
\]

Q.2. Redraw the figures below and shade in the amount shown:
(a) \[
\begin{array}{c}
\circle \\
\circle \\
\circle \\
\square
\end{array}
\]
Shade in \[
\frac{4}{5}
\]
(b) \[
\begin{array}{c}
\square
\end{array}
\]
Shade in \[
\frac{5}{6}
\]
(c) \[
\begin{array}{c}
\square \\
\square \\
\square \\
\square
\end{array}
\]
Shade in \[
\frac{2}{5}
\]

Q.3. Change the following to equivalent fractions:
(a) \[
\frac{1}{2} = \frac{16}{\square}
\]
(b) \[
\frac{1}{3} = \frac{6}{\square}
\]
(c) \[
\frac{3}{5} = \frac{10}{\square}
\]

Q.4. Change the following to equivalent fractions:
(a) \[
\frac{2}{3} = \frac{9}{\square}
\]
(b) \[
\frac{3}{4} = \frac{8}{\square}
\]
(c) \[
\frac{4}{5} = \frac{15}{\square}
\]

Q.5. Write the following as simple fractions (Hint: divide top and bottom of each fraction by 2):
(a) \[
\frac{8}{10}
\]
(b) \[
\frac{6}{8}
\]
(c) \[
\frac{4}{6}
\]
(d) \[
\frac{10}{12}
\]

Q.6. Write the following as simple fractions (Hint: divide top and bottom of each fraction by 3):
(a) \[
\frac{6}{15}
\]
(b) \[
\frac{9}{12}
\]
(c) \[
\frac{3}{9}
\]
(d) \[
\frac{15}{18}
\]

Q.7. Change these mixed fractions to improper (part has been done):
(a) \[
1 \frac{1}{2} = \frac{\square}{2}
\]
(b) \[
1 \frac{3}{4} = \frac{\square}{4}
\]
(c) \[
2 \frac{1}{3} = \frac{\square}{3}
\]

Q.8. Change these mixed fractions to improper fractions:
(a) \[
1 \frac{2}{3}
\]
(b) \[
2 \frac{3}{4}
\]
(c) \[
1 \frac{2}{5}
\]
(d) \[
3 \frac{1}{2}
\]