

**S.2 MATH WORKSHEET THREE ANSWERS**

**1. Simplify the following expressions**

(a) $\frac{m+1}{2} + \frac{m-3}{2}$  $= m - 1$	(b) $\frac{2w+1}{2} - \frac{6w-2}{4}$  $= \frac{-w + 2}{2} \text{ or } \frac{2 - w}{2}$
(c) $\frac{y+6}{5} + \frac{2y-5}{15}$  $= \frac{5y + 13}{15}$	(d) $\frac{5-2n}{4} + \frac{3p-1}{2}$  $= \frac{6p - 2n + 3}{4}$
(e) $\frac{3x+4}{11} + \frac{2x}{33}$  $= \frac{11x + 12}{33}$	(f) $\frac{v}{2} - \frac{v+1}{4}$  $= \frac{v - 1}{4}$
(g) $x + 2a - \frac{3x-1}{4} - \frac{2a}{5}$  $= \frac{5x + 32a + 5}{20}$	(h) $\frac{x-1}{2} - \frac{1}{3} + \frac{x}{3}$  $= \frac{5}{6}(x - 1)$
(i) $\frac{4a}{7} + \frac{3a+5}{2} - \frac{3(a+2)}{3}$  $= \frac{28a + 33}{14}$	(j) $\frac{3p}{12} - \left(\frac{p}{2} - \frac{p}{4} + \frac{5p}{6}\right)$  $= -\frac{5p}{6}$

**2. Solve the following equations**

(a) $\frac{5x+2}{3} - \frac{7x+2}{5} = 2$  $x = 6\frac{1}{2}$	(b) $\frac{3}{4}(2a + 1) = \frac{5}{6}(a + 5)$  $a = 5\frac{1}{8}$
(c) $\frac{n-1}{2} - \frac{n-3}{4} = \frac{1}{2}$  $n = 1$	(d) $\frac{2}{2} - \frac{x+1}{4} = \frac{x}{3} + 2$  $x = -2\frac{1}{7}$
(e) $\frac{n+1}{2} - \frac{n-3}{4} = \frac{n+2}{3}$  $n = 7$	(f) $\frac{4p-1}{3} - \frac{3p-1}{2} = \frac{5-2p}{4}$  $p = 3\frac{1}{4}$
(g) $\frac{1}{5}(w + 6) - \frac{1}{15}(2w - 5) = \frac{1}{3}(1 - w)$  $w = -3$	(h) $\frac{1}{2} - \frac{x}{6} = -\frac{5}{2}$  $x = 18$
(i) $\frac{4p-1}{3} - \frac{3p-1}{2} = 1$  $p = -5$	(j) $\frac{x+1}{3} + \frac{x-4}{2} = 5$  $x = 8$

END.