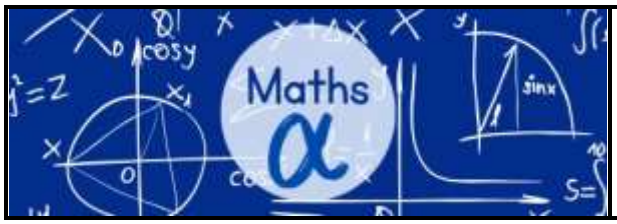



# Year 7
# Weekly Tutorial - 10

**mathsalpha.com**

**1.** Expand and simplify.

**a)** $5(x-7)-(3x-2)$

**b)** $2x(x-y)-y(x+y)$

**2.** Factorize.

**a)** $27x^2+9x$

**b)** $5x^2-15x$

**3.** Solve.

**a)** $\frac{2}{3x-1}=\frac{3}{5x-7}$

**b)** $\frac{x+1}{2x-1}=\frac{3}{2}$

**4.** Solve.

**a)** $3-5(x+1)>15-4x$

**b)** $3(5-x)\leq 12-4x$

**5.** Find the value of $y$, if $a=-3, b=4, c=\frac{1}{2}$ and $y=\frac{a^2-2bc}{3c}$

**6.** Simplify the following. Give the answers in its simplest form.

**a)** $2\frac{3}{4}+3\frac{2}{3}$

**b)** $7\frac{5}{8}-5\frac{1}{4}$

**c)** $2\frac{1}{7}-\frac{3}{5}$

**d)** $5\frac{3}{8}-3\frac{1}{5}$

**7.** Simplify the following. Give the answers in its simplest form.

**a)** $3\frac{1}{3}\times 1\frac{5}{7}$

**b)** $2\frac{3}{7}\times 3\frac{1}{6}$

**c)** $8\frac{3}{4}\times 3\frac{3}{7}$

**d)** $3\frac{1}{5}\div\frac{8}{15}$

**e)** $3\frac{1}{5}\div 3\frac{2}{10}$

**f)** $2\frac{3}{7}\div 1\frac{3}{14}$



Dharana Siriwarnage, PGD (maths), BSc

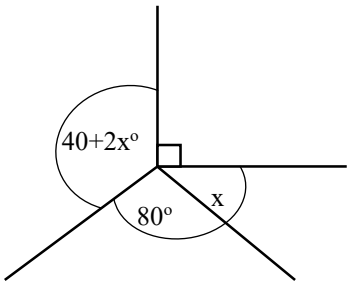
**8.** Work out the following.

**a)** $3\frac{1}{5} - 2\frac{1}{3} \div 2\frac{4}{5}$

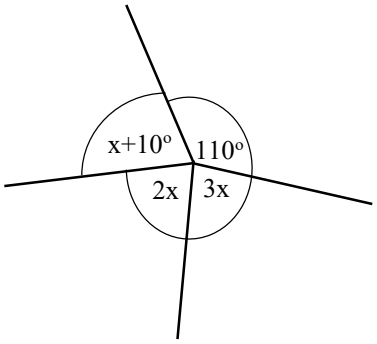
**b)** $12 + 3\frac{2}{5} \div 3\frac{3}{4}$

**9.** Find unknown angles.

**a)**

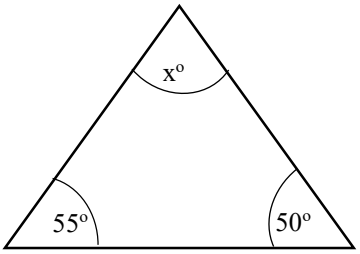



**b)**

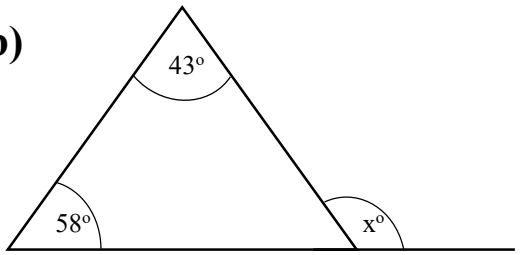



**10.** Find unknown angles.

**a)**




**b)**






Dharana Siriwarnage, PGD (maths), BSc