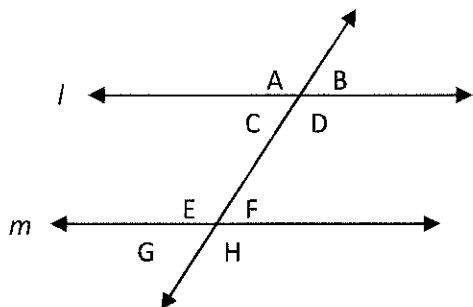## Parallel Lines With Algebra   *Remember – drawings are not necessarily drawn accurately!*

1 – 3: Find the value of x in each question given that lines l and m are parallel. Check your answers by finding the measure of each angle.

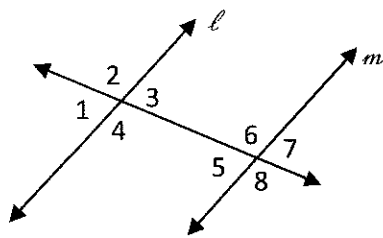

1) $m\angle C = 3x - 10;$
$m\angle F = x + 70$

2) $m\angle D = x + 27;$
$m\angle F = 2x - 39$

3) $m\angle B = 2(x + 40);$
$m\angle G = 5x + 44$

4 – 6: Find the value of x in each question given that lines l and m are parallel. Check your answers by finding the measure of each angle.

4) $m\angle 3 = 2x + 16;$
$m\angle 5 = 7x - 4$

5) $m\angle 4 = 8x - 80;$
$m\angle 5 = -2x + 116$

6) $m\angle 2 = 3x + 19;$
$m\angle 6 = 2(x + 10)$

7) Given $l \parallel m \parallel n$ and $s \parallel t$, and $m\angle 1 = 143°$, find

$m\angle 2 = $ _____ $m\angle 11 = $ _____ $m\angle 20 = $ _____

$m\angle 3 = $ _____ $m\angle 12 = $ _____ $m\angle 21 = $ _____

$m\angle 4 = $ _____ $m\angle 13 = $ _____ $m\angle 22 = $ _____

$m\angle 5 = $ _____ $m\angle 14 = $ _____ $m\angle 23 = $ _____

$m\angle 6 = $ _____ $m\angle 15 = $ _____ $m\angle 24 = $ _____

$m\angle 7 = $ _____ $m\angle 16 = $ _____

$m\angle 8 = $ _____ $m\angle 17 = $ _____

$m\angle 9 = $ _____ $m\angle 18 = $ _____

$m\angle 10 = $ _____ $m\angle 19 = $ _____