3. Angles in a straight line = 180°.

164° + 26° = 190° so it cannot be a straight line.

4. a) $180° = \underbrace{90° + 15°} + w$

$180° = 105° + w$

$75° = w$.

b) $180° = \underbrace{40° + 20° + 20°} + y$

$180° = 80° + y$

$100° = y$

c) $180° = \underbrace{35° + 76°} + x$

$180° = 111° + x$

$69° = x$

d) $180° = \underbrace{32° + 41°} + z$

$180° = 73° + z$

$107° = z$.

5.a) There are 4 k's.

$180° \div 4 = 45$ so $k = 45°$

b) There are 6 g's

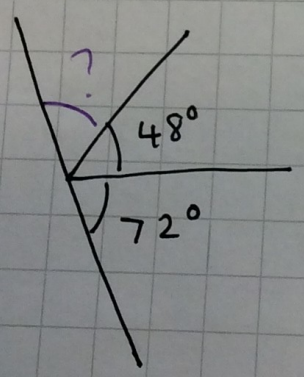
$180° \div 6 = 30$ so $g = 30°$.

6. $180° = 111° + a + a + a$

$69° = a + a + a$ $69 \div 3 = 23$

so $a = 23°$.

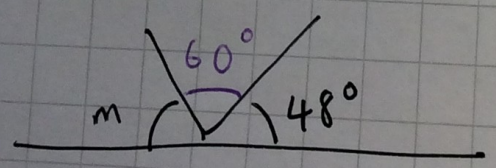
7.



$180° = \underbrace{72° + 48°} + ?$

$180° = 120° + ?$

$60° = ?$

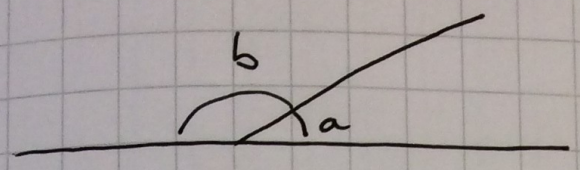


$180° = m + \underbrace{60° + 48°}$

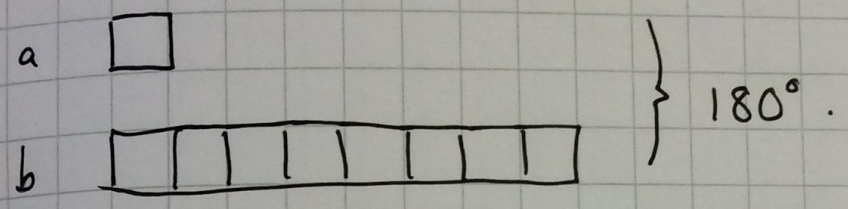
$180° = m + 108°$

$72° = m$

8.



b is 8 times the size of a.



I can see there are 9 pieces.

$180° \div 9 = 20$.

$a = 20°$

$b = 20 \times 8 = 160°$.