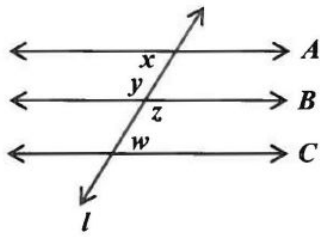
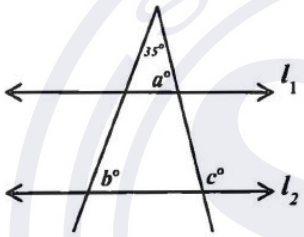
SATPREP
Assignment :*Lines and Angles*

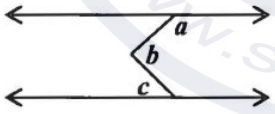
Easy



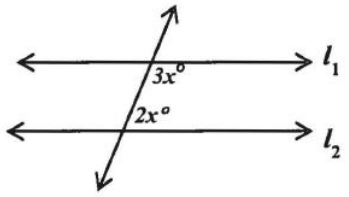
1. In the figure above, lines A, B, and C are parallel to one another. If $x = 65°$, what is the value of w, in degrees?



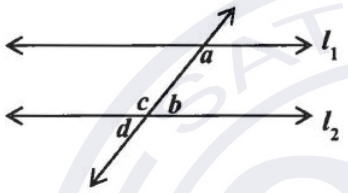
2. In the figure above, if $l_1 \parallel l_2$ and c = 110, what is the value of b in degrees?
   a) 70
   b) 75
   c) 80
   d) 85



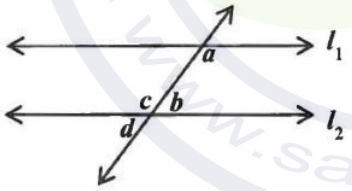
3. In the figure above, $l_1 \parallel l_2$, $a = 130°$, and c = 40°. What is the value of b?
   a) 50°
   b) 60°
   c) 70°
   d) 90°



4. In the figure above $l_1 \parallel l_2$, what is the value of x?
   a) 36
   b) 40
   c) 45
   d) 54

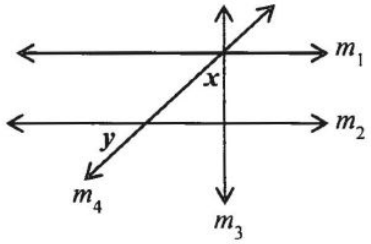


5. If $l_1 \parallel l_2$ in the figure above, what is the value of $\frac{1}{2}(b + a) - (c + d)$?
   a) $-90°$
   b) $0°$
   c) $-120°$
   d) $90°$

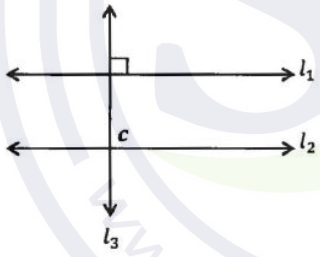


6. In the figure above, $l_1 \parallel l_2$. If angle a is $130°$, what is the value of d?
   a) $80°$
   b) $75°$
   c) $50°$
   d) $45°$

Medium

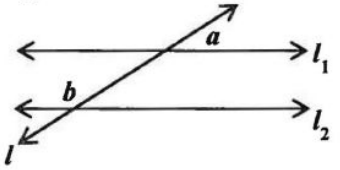


7. In the figure above, if m_1 is parallel to m_2 and m_3 is perpendicular to m_1, what is the sum of x and y, in degrees?
   a) 180°
   b) 120°
   c) 100°
   d) 90°

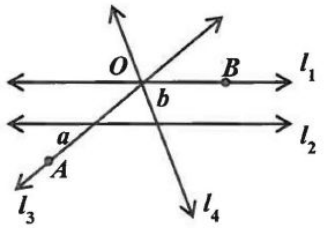


8. In the figure above, $l_1 \parallel l_2$ and $l_3 \perp l_1$. Which of the following must be true?
   a) $c < 90°$
   b) $c > 90°$
   c) $c = 90°$
   d) $l_1 \perp l_2$

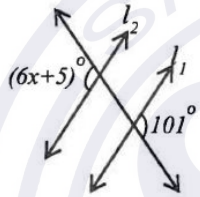
9. In the figure below, $l_1 \parallel l_2$ and $b = 2a + 6$. What is the value of a, in degrees?



Note: Figure not drawn to scale.

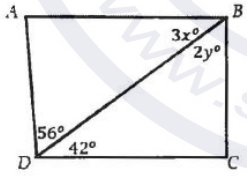


10. In the figure above, $l_1 \parallel l_2$ and l_4 bisects $\angle AOB$. If $3a = 2b$, what is the value of b, in degrees?



11. In the figure above, $l_1 \parallel l_2$. What is the value of x?
    a) 15
    b) 16
    c) 17
    d) 18

12. In the figure below, $\overline{AB} \parallel \overline{CD}$ and $\overline{CD} \perp \overline{BC}$. What is the value of $x + y$?



    a) 21
    b) 34
    c) 36
    d) 38