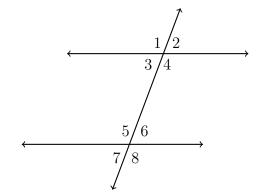
## 3.3 Parallel lines and transversals

- 1. Do Now: Identify each angle
  - (a) Opposite ∠4
  - (b) Corresponding to  $\angle 3$
  - (c) Alternate exterior to ∠8
  - (d) Same side interior to  $\angle 5$
  - (e) Alternate interior to  $\angle 4$



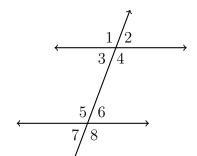
2. Spicy Do Now: The volume of a sphere is  $(121\frac{1}{2})\pi$ . Find its radius.

3. Given two parallel lines and a transversal, as shown, with  $m\angle 1=125^{\circ}$ . Write down the value of each angle measure.

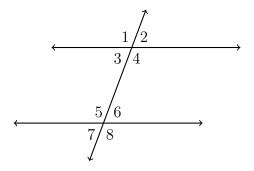
(a) 
$$m \angle 5 =$$

(b) 
$$m \angle 6 =$$

(c) 
$$m \angle 4 = 5y$$
. Find y.



4. Given two parallel lines and a transversal, with  $m\angle 1 = 3x - 10$  and  $m\angle 8 = 2x + 32$ . Write an equation, then solve for x.



5. Solve for x

(a) 
$$\frac{1}{3}x - 7 = -4$$

(c) 
$$\frac{1}{2}(x-7) = 12$$

(b) 
$$\frac{3}{4}x = 9$$

(d) 
$$\frac{2}{3}(x+7) = x-4$$

6. The perimeter of a rectangle is 54 centimeters. If its length is 6 cm., what is its width?