

Converting Between Units of Measure

Ex: Convert 15 feet to yards.

$$15 \text{ ft} \cdot \frac{1 \text{ yd}}{3 \text{ ft}} = 5 \text{ yd}$$

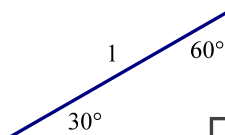
Convert:

1. 60 inches to feet
2. 9 yards to feet
3. 8 millimeters to meters
4. 2 yards to inches
5. 18 centimeters to millimeters

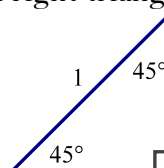
Special Right Triangles with Hypotenuse = 1

Solve the triangles using special right triangles

6.



7.



Adding/Subtracting

Fractions with π

Ex: $\pi + \frac{\pi}{4} = \frac{4\pi}{4} + \frac{\pi}{4} = \frac{5\pi}{4}$

(Leave answer in terms of π)

Simplify. No Calculator!

8. $2\pi - \frac{\pi}{3}$

9. $\pi + \frac{5\pi}{6}$

10. $\pi - \frac{\pi}{6}$

11. $2\pi - \frac{5\pi}{6}$

12. $\frac{7\pi}{4} + 2\pi$

13. $-\frac{7\pi}{6} + 2\pi$

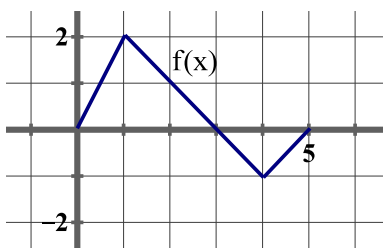
14. $\frac{22\pi}{3} - 6\pi$

15. $\frac{5\pi}{6} + \frac{\pi}{3}$

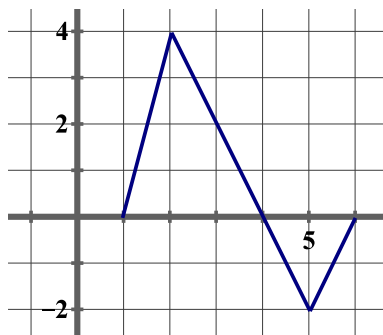
16. $\frac{5\pi}{3} - \frac{7\pi}{4}$

Transformations

Ex: Given the graph of $f(x)$



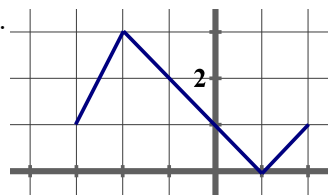
Find the equation in terms of $f(x)$



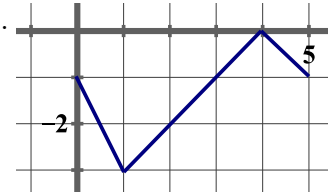
Answer: $y = 2f(x-1)$

Find the equation in terms of $f(x)$

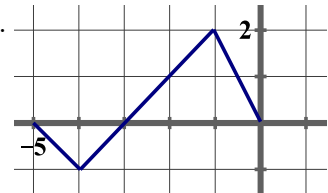
17.



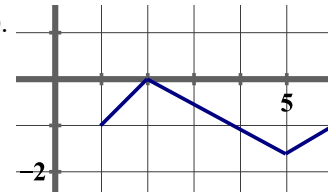
18.



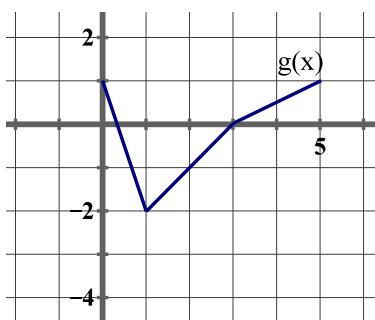
19.



20.



Given the graph of $g(x)$, sketch the graph.



21. $g(x+2) - 3$

22. $3g(x) + 4$

23. $g\left(\frac{x}{2}\right)$

24. $-g(x+2)$