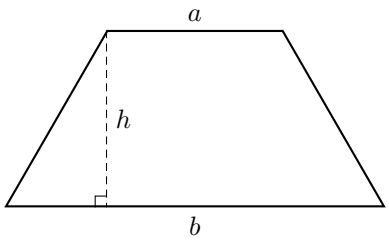
Lone Star
section 4

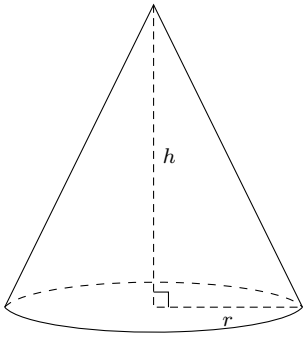
Expressions quiz

1. (2.1) You are counting points for a basketball game. Ask the user the amount of 3-pointers scored and the amount 2-pointers scored, find the final points for the team and output the value.
   For example, if a team scored 5 2-pointers and 7 3-pointers, then their score would be 31.
   If a team scored 6 2-pointers and 5 3-pointers, then their score would be 27.

2. (2.2) Write a program that calculates then outputs the area of a trapezoid. The user should be able to pick both bases and the height (that is: a, b, and h).
   Hint: $A = \frac{a+b}{2}h$



3. (2.3) Write a program that calculates then outputs the volume of a cone.
   The user should be able to pick r (the radius) and h (the height).
   Use the value of π from the math module in your calculation.
   Hint: $V = \pi \cdot \frac{r^2 h}{3}$

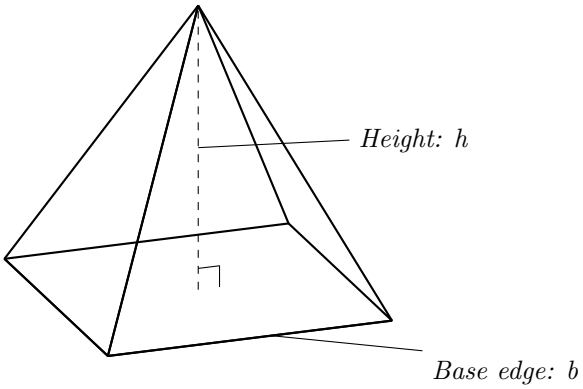


Dot Matrix
section 5

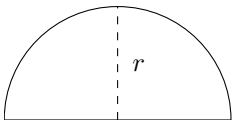
Expressions quiz

1. (2.1) You are counting points for a basketball game. Ask the user the amount of 3-pointers scored and the amount 2-pointers scored, find the final points for the team and output the value.
   For example, if a team scored 5 2-pointers and 7 3-pointers, then their score would be 31.
   If a team scored 6 2-pointers and 5 3-pointers, then their score would be 27.

2. (2.2) Write a program that calculates then outputs the volume of a right square pyramid. The user should be able to pick b (the base edge) and h (the height).
   Hint: $V = \dfrac{b^2 h}{3}$



3. (2.3) Write a program that calculates and then outputs the area of a semi–circle. The user should be able to pick the radius. Use the value of π from the math module in your calculation.
   Hint: $A = \dfrac{1}{2}\pi r^2$

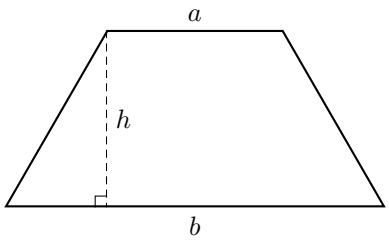


Dark Helmet
section 4

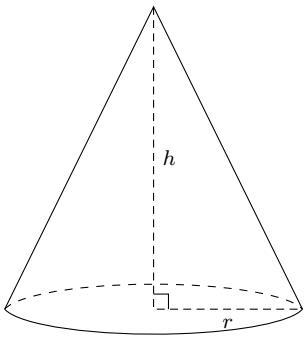
Expressions quiz

1. (2.1) You are counting points for a basketball game. Ask the user the amount of 3-pointers scored and the amount 2-pointers scored, find the final points for the team and output the value.
   For example, if a team scored 5 2-pointers and 7 3-pointers, then their score would be 31.
   If a team scored 6 2-pointers and 5 3-pointers, then their score would be 27.

2. (2.2) Write a program that calculates then outputs the area of a trapezoid. The user should be able to pick both bases and the height (that is: a, b, and h).
   Hint: $A = \frac{a+b}{2}h$



3. (2.3) Write a program that calculates then outputs the volume of a cone.
   The user should be able to pick r (the radius) and h (the height).
   Use the value of π from the math module in your calculation.
   Hint: $V = \pi \cdot \frac{r^2 h}{3}$



President Skroob
section 1

Expressions quiz

1. (2.1) A farmer is asking you to tell him how many legs can be counted among all his animals. The farmer breeds three species:

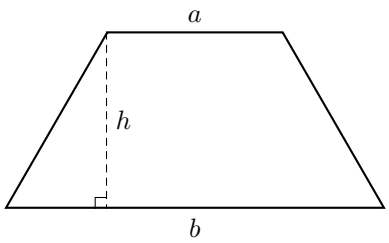
   - chickens, which have **2** legs
   - cows, which have **4** legs
   - pigs, which have **4** legs

   Write a program that asks the farmer how many of each animal he has, and then outputs the total number of legs. For example,

```
How many chickens do you have?: 5
How many cows do you have?: 1
How many pigs do you have?: 3
The total amount of legs on your farm is 26.
```

```
How many chickens do you have?: 3
How many cows do you have?: 4
How many pigs do you have?: 7
The total amount of legs on your farm is 50.
```

2. (2.2) Write a program that calculates then outputs the area of a trapezoid. The user should be able to pick both bases and the height (that is: a, b, and h).
   Hint: $A = \frac{a+b}{2}h$



3. (2.3) Write a program that calculates and then outputs the area of a semi–circle. The user should be able to pick the radius. Use the value of π from the math module in your calculation.
   Hint: $A = \frac{1}{2}\pi r^2$