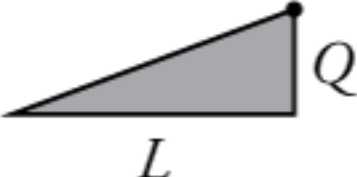
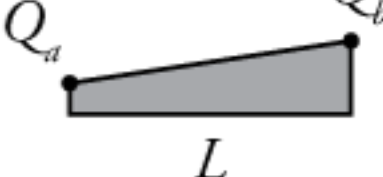
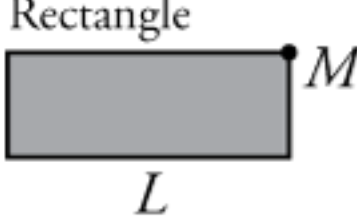
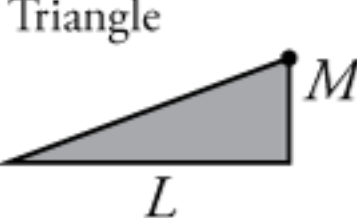
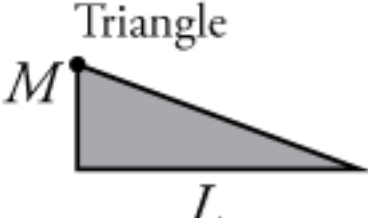
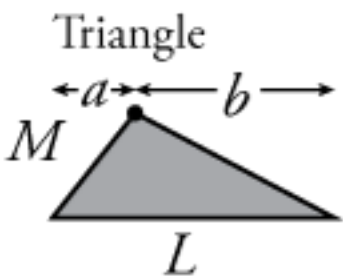
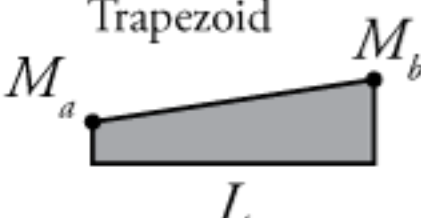
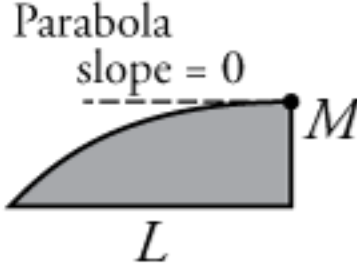
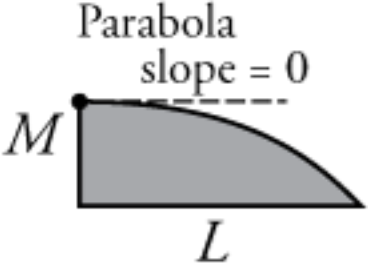
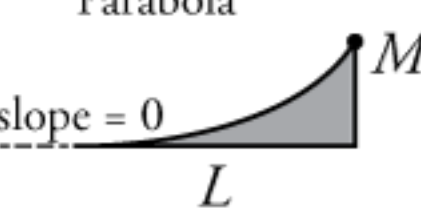
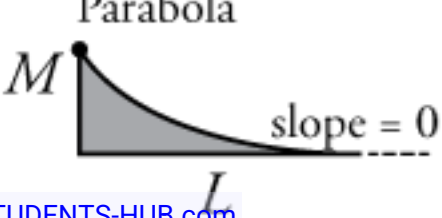


Table for: $\int_0^L M Q dx$

The values in the table represent the integration of the product of the two shapes with a common length L .

	Rectangle 	Triangle 	Triangle 	Trapezoid 
Rectangle 	LMQ	$\frac{LMQ}{2}$	$\frac{LMQ}{2}$	$\frac{LM}{2}(Q_a + Q_b)$
Triangle 	$\frac{LMQ}{2}$	$\frac{LMQ}{3}$	$\frac{LMQ}{6}$	$\frac{LM}{6}(Q_a + 2Q_b)$
Triangle 	$\frac{LMQ}{2}$	$\frac{LMQ}{6}$	$\frac{LMQ}{3}$	$\frac{LM}{6}(2Q_a + Q_b)$
Triangle 	$\frac{LMQ}{2}$	$\frac{MQ}{6}(L + a)$	$\frac{MQ}{6}(L + b)$	$\frac{M}{6} [Q_a(L + b) + Q_b(L + a)]$
Trapezoid 	$\frac{LQ}{2}(M_a + M_b)$	$\frac{LQ}{6}(M_a + 2M_b)$	$\frac{LQ}{6}(2M_a + M_b)$	$\frac{L}{6} [Q_a(2M_a + M_b) + Q_b(M_a + 2M_b)]$
Parabola slope = 0 	$\frac{2LMQ}{3}$	$\frac{5LMQ}{12}$	$\frac{LMQ}{4}$	$\frac{LM}{12}(3Q_a + 5Q_b)$
Parabola slope = 0 	$\frac{2LMQ}{3}$	$\frac{LMQ}{4}$	$\frac{5LMQ}{12}$	$\frac{LM}{12}(5Q_a + 3Q_b)$
Parabola slope = 0 	$\frac{LMQ}{3}$	$\frac{LMQ}{4}$	$\frac{LMQ}{12}$	$\frac{LM}{12}(Q_a + 3Q_b)$
Parabola 	$\frac{LMQ}{3}$	$\frac{LMQ}{12}$	$\frac{LMQ}{4}$	$\frac{LM}{12}(3Q_a + Q_b)$