The original equation can be rewritten as two equations without absolute value:

$-6d - 8 = 34$ or $-6d - 8 = -34$

Add 8 to both sides of both equations: $-6d = 42$ or $-6d = -26$

Divide both sides of both equations by -6: $d = -7$ or $d = 4\frac{1}{3}$